Prevalence and Intensity of Occupational Stress Sources and Manifestations in Southwestern Indiana Teachers

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Abstract

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Prevalence and Intensity of Occupational Stress Sources and Manifestations in Southwestern Indiana Teachers

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Occupational stress for teachers has created an environment where the prevalence and intensity of teacher stress sources and manifestations of depression, anxiety, and burnout have become a focus in research. While researchers have oftentimes identified specific areas of concern, a gap exists in research where similar geographical regions and district groups are studied and analyzed together. Researchers from peer-reviewed journal articles have presented various sources of stress that exhibit themselves in internal or external forms. These stressors can cause physical, behavioral, and mental symptoms in educators. This research study used the Teacher Stress Inventory (TSI) and demographic survey to collect data from 183 teachers in Southwestern Indiana. This data was collected and analyzed to identify the total stress score, prevalent sources, manifestations, and correlations between demographics and the TSI results. The data revealed that only gender was a predictor of TSI total stress scores, prevalent stress sources, and manifestations. The data also identified higher than average prevalent stress sources from work-related stressors and time management, as well as higher than average manifestations in emotional and fatigue manifestations. The impact of this research should be used to help districts identify areas of stress to support teacher retention, reduce stress, and promote a healthy work environment in Southwestern Indiana educational leaders.

Keywords: stress, teacher, depression, anxiety, burnout, sources, symptoms, solutions, education, manifestations, prevalence

Dedication

I dedicate this to my supportive family:

Thank you for believing in me.

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Chapter 1: Introduction

In the profession of education, much discussion takes place around educational practices that many researchers find concerning, from budget to curriculum to student needs (Kobler & Rentner, 2011; Loucks, S. & Pratt, H., 1979). Many teachers have noticed that federal, state, and county governments have dictated more be done, often at the expense of the teacher's own finances, time or curriculum (Brasfield et al., 2019; Brevetti, 2014; Haydon et al., 2018; Sass et al., 2012). With many teachers leaving the field of education to pursue less stressful jobs, questions arise as to why this is so (Anderson et al., 1999). What if stress was more widespread or intense than anyone realizes? How do teachers handle this stress or how does it handle them? This study identified the prevalence and intensity of work-based stress sources and manifestations, which contribute to teacher depression, anxiety, and burnout, as well as impact the well-being and health of Southwestern Indiana teachers.

Background

These questions are not necessarily new to education but have continued to be a studied topic. With this literature and the topics of study in mind, in this study I collect and analyze survey information to shed new light in two areas. First, I seek to look deeper into the prevalence and intensity of the stress sources and manifestation symptoms that evolve. Second, in studying this particular area (the Southwest region of Indiana) this research provides new insight into a geographically similar area where teacher stress concerns are common (Tristate Homepage, 2021).

With many of Indiana's educator programs suffering the loss of new applicants and educators leaving the profession, it is important to address what conditions create these issues

and what health risks have caused former educators to leave a vital profession (Wilson, 2022; Dean, 2019). While many notable researchers have begun to deep dig into the problems that exist, identifying the core issues that still exist in education (teacher stress sources and manifestations) and adding to the current research is critical for creating a solution to the problem.

Researchers Chris Kyriacou and John Sutcliffe have been involved in educator depression, anxiety, and burnout research since the late 1970s (Kyriacou and Sutcliffe, 1977; 1978). Continuing from this work, other researchers have targeted specific areas of where these issues stem (Anderson et al., 1999; Kyriacou, 2001; Nagel & Brown, 2003). Depression (Anderson et al., 1999; Ansley et al., 2016), anxiety (Anderson et al., 1999; Ansley et al., 2016; Kyriacou, 2001), and burnout (Bianchi, et. al., 2014; Guglielmi & Tatrow, 1998; Kahn et al., 2006; Wisniewski & Gargiulo, 1997) are all researched areas that are considered side effects of stress from the job.

After reviewing articles for common themes, many areas of correlation were found. Teacher stress sources (Anderson et al., 1999; Kyriacou, 2001), symptoms (Bianchi et al., 2014; Bradshaw, 1991, Guglielmi & Tatrow, 1998; Kahn et al., 2006; Wisniewski & Gargiulo, 1997), and stress management solutions (Ansley et al., 2016; Bradshaw, 1991; Dunn et al., 2016; Nagel & Brown, 2003) to deal with depression, anxiety, and burnout were prevalent themes in the literature reviewed. Research largely existed in qualitative studies with few studies using quantitative data to identify regional characteristics. While many researchers have looked at the background and causes of stress, fewer have proposed viable solutions to cope and mentally handle the after-effects of stress. More so, even less information exists as to the number of

educators who experienced this phenomenon in education in Indiana, with no peer-reviewed information available for Indianan teachers who face depression, anxiety, and burnout as related to occupational stress.

While much of the research showed the dire circumstance teachers face broadly, some research existed that nailed down the causes (Nagel & Brown, 2003), solutions (Anderson et al., 1999), and possible outcomes (Dunn et al., 2017; Kyriacou, 2001). While this information was slim and mostly quantitative, some research did exist to support qualitative studies (Dunn, et al.), but did not delve into what treatment looked like to deal with the symptoms that could not be abated by yoga, meditation, or saying no. Simply put, research neglected to reveal regional data, whereas quantitative research was made up of subjects with a similar demographic and situational makeup. As this researched progressed, it focused heavily on the area where the researcher previously resided in Southwestern Indiana. Here, many educators described being depressed and/or anxious and the researcher witnessed burnout. Focusing on Southwestern Indiana, with the research I sought to capture to what extent these experiences occurred and how they impacted the health and well-being of local teachers.

Statement of the Problem

Occupational stress can impact the physical and psychological well-being of teachers (Johnson et al., 2005). While this concept has been studied for over 50 years, areas of impact, such as manifestations of stress, are largely vague (Anderson et al., 1999; Kyriacou, 2001; Nagel & Brown, 2003; Smith, 1999). Some researchers have attempted to focus on specific geographical areas of study, such as the mid-south, Texas or South Carolina (Brasfield et al., 2019; Gonzalez et al., 2017; Torres et al., 2009). Others have identified specific teacher stressors,

such as legislative policies (Brevetti, 2014; Haydon et al., 2018; Sass et al., 2012), vocational influences, such as paperwork (Anderson et al., 1999: Torres et al., 2009; Wisniewski & Gargiulo, 1997) or inadequate prep time (Anderson et al., 1999; Shernoff et al., 2011), and personal characteristics, such as age (Hughes, 2006). However, these studies do not focus on one area's needs, but rather consider the needs to be state-wide or even country-wide.

Other researchers have identified high-demand areas such as STEM (Sass, et al., 2016) or high stakes testing (Gonzalez, et al., 2016; Madaus & Russell, 2010). Observing the more modern literature surrounding teacher stress, educators have frequently noted issues with administrative action, student problems, teacher perceptions, peer interaction, time, and parents/families as key sources of stress (Dean, 2019; Haydon et al., 2018).

Due to the complexity of stress as related to teachers, many topics have been studied with large areas sampled. However, little information focused on areas or regions that are geographically alike or share district similarities. With this gap in literature, it would be difficult for districts to make positive changes without seeing correlations between occupational problems, such as frequent and intense stress, their manifestation, and the demographics of the region. Purposeful data being collected and analyzed to show the prevalence and intensity of occupational stress and manifestations in Southwestern Indiana may influence future district considerations in the area of occupational stressors.

Purpose Statement

With the increase of stress impacting the teaching careers and professional growth of many, Diliberti et al. (2021) call on researchers to study the prevalence and intensity of stress and its manifestations as it impacts teachers. With this study, local district leaders can target the

issues that teachers face, retain teachers, reduce stress, and promote healthy work environments in Southwest Indiana. The purpose of this study is to examine the prevalence and intensity of stress sources and manifestation factors in Southwestern Indiana public K-12 educators due to occupational stress. This quantitative study also explores the impact of teacher demographics on the Teacher Stress Inventory (TSI) score's causes, manifestations, and total score. Furthermore, through simple random sampling survey methods, relationships between demographics of Southern Indiana teachers and school-based factors (including time management, work-related stressors, professional distress, discipline and motivation, and professional investment, and manifestations of stress) are analyzed. It is important for the research to prove valuable to the communities in which the research is conducted, hence the use of one geographic location rather than wide-spread research. The researcher did not participate in the survey and only used the data as a source for analysis. Using a positivist paradigm, which explores the awareness of science and truth in human behavior, the survey data collected is used to describe the prevalence and intensity of occupational stress sources and manifestations (Lincoln et al., 2017; Park et al., 2020).

Significance

Identification of the causes of stress resulting in depression, anxiety, and burnout within this Southwestern region's districts is intended to help target the needs of new and veteran teachers who are struggling to balance their professional and personal lives. Noting the prevalence and intensity of stress sources and manifestations of this phenomenon helps identify areas of concern to help improve teacher retention and policies, reduce stress, and maintain healthy teaching environments. While the stress of teaching will always exist to a degree, there

are indicators that these stressors are impacting this region based on teacher anecdotes and visible frustrations.

Research Questions

Six research questions were explored in order to identify the frequency and intensity of prevalent sources of teacher stress and manifestations:

Research Question 1. What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers?

Research Question 2. What sources of stress are prevalent among Southwestern Indiana teachers?

Research Question 3. What manifestations of stress are prevalent among Southwestern Indiana teachers?

Research Question 4. Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 5. Are the sources of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 6. Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Definition of Terms

The following terms used in this study were defined to improve consistency and understanding throughout the study:

administration - involves the management of all school operations, from creating a safe learning environment to managing the school budget (Learn.org, 2021).

anxiety - an abnormal and overwhelming sense of fear and apprehension. It is often accompanied by physical symptoms, including tension, sweating, and increased pulse rate, doubt concerning the reality and nature of the threat, and self-doubt about the capacity to cope with it.

burnout - a consequence of excessive stress leading to chronic fatigue and lack of enthusiasm (Freudenberger, 1974).

district – sectioned division of schools.

external stress - stress capable of being perceived outwardly.

internal stress - stress capable of being perceived inwardly.

manifestation – a behavioral, mental, or physical expression of stress.

occupational stress - of or relating to job or occupation bodily or mental tension.

quantitative research - collecting and analyzing numerical data for statistical analysis.

retention - act of keeping one's pay or service.

school-based factor – a direct contributor to a result based on a school aspect,

standardized test – a test administered and scored in a way that is consistent.

STEM - abbreviation for science, technology, engineering and mathematics.

stress – collective name for anxiety, depression, and burnout which could result in a manifestation

symptom – an indicator of a disturbance existing .

well-being – being happy, content, and healthy .

Assumptions

Due to the nature of the topic, it is assumed that survey results are reliable and valid from the anonymous responses, as no names were attached to the data collected. It is assumed that each participant engaged in this study honestly.

Limitations

This research is subject to various limitations. As with any study, limitations of exact replication are possible. Various types of bias can limit this research. Factors such as lack of internet access, question sensitivity, sampling bias, low response rates, and missing surveys can affect survey reliability (Nardi, 2018).

The timing of the study (the survey was conducted in October of 2021) is also a limitation based on teacher responses and feelings of stress and burnout early in the year, as opposed to completing this study at the end of the year. Other considerations for a lack of participation may include previous commitments, lack of time, lack of stress or manifestations of stress or an unwillingness to complete a survey that is not mandatory. Lastly, the survey permission information was submitted to one district that required each principal to provide consent. This step in the survey proved to be difficult as most of the principals in that district did not respond after an initial email and two reminders.

Another factor that may also limit the study is the pandemic disease coronavirus (COVID-19), declared by the World Health Organization on March 11th, 2020 (World Health Organization, 2020). At the onset of schools closing in March of 2020, many schools did not reopen their doors to in-person, face-to-face learning full-time during the 2020 - 2021 school year. Due to the unprecedented concerns for student safety, many school districts began the

2020 – 2021 school year with various modes of instruction, which varied among remote instruction, hybrid-instruction, face-to-face instruction or a combination of all three. The inconsistent scheduling, unprecedented learning style, and possible quarantining may have impacted and limited this study.

Delimitations

Based on the large number of counties in Indiana's Southwest region, careful consideration was taken to identify counties that represented the districts that make up this region. Based upon the impact of geographical distance, television projection, and large-city status, counties that considered the most populous city the "hub" were targeted in the identification of "Southwestern Indiana teachers." These districts were also subjected to the same or similar state and federal regulations. The participants were selected through simple random sampling to ensure a random and diverse sample of teachers was selected to represent Southwestern Indiana teachers. Another delimitation was the timing of this survey, October 2021.

Educational stress is a complicated matter with more research needed to identify the frequency and intensity of prevalent stressors and manifestations. Southwestern Indiana provided data to identify the components of stress and manifestations in the region's teachers.

Chapter 2: A Review of Literature

Teacher stress has become a phenomenon in education over the last 50 years (Anderson et al., 1999; Kyriacou, 2001; Nagel & Brown, 2003; Smith, 1999) with depression (Anderson et al., 1999; Ansley et al., 2016), anxiety (Anderson et al., 1999; Ansley et al., 2016; Kyriacou, 2001), and burnout (Bianchi et al., 2014; Guglielmi & Tatrow, 1998; Kahn et al., 2006; Wisniewski & Gargiulo, 1997) all considered side effects of stress. While many researchers have looked at the background and causes of stress, even fewer have proposed viable solutions to cope with and mentally handle the after-effects of stress. What is the relationship between stress and the teacher, and how does it impact the act of teaching?

After reviewing articles for common themes, many areas of correlation were found. Prevalent themes in the literature reviewed include sources of stress for teachers (Anderson et al., 1999; Brasfield et al., 2019; Kyriacou, 2001), symptoms (Bianchi et al., 2014; Bradshaw, 1991, Guglielmi & Tatrow, 1998; Kahn et al., 2006; Wisniewski & Gargiulo, 1997), and stress management solutions (Ansley et al., 2016; Bradshaw, 1991; Dunn et al., 2016; Nagel & Brown, 2003). This literature review aims to provide an in-depth look at the research available to identify the sources, symptoms, and stress management solutions.

Research Related to Depression, Anxiety or Burnout

Much of the in-depth research needed to understand depression, anxiety, and burnout could be found in qualitative research such as Smith (1999), where narrative research drove the focus on how depression can impact people. One challenge in qualitative research is that the inquiry can be critical about the issue, particularly if it is a social one, as this one is (Flick, 2017). Flick suggested that in research and ethics, researchers should keep in mind the relationship they

have to the participants and how they, and not the researcher, can benefit from this research. While much of the research focused on narrative inquiry, some researchers, such as Atkinson and Morriss (2017), encouraged ethnographies when delving into depression, as it required a researcher's acquisition of a degree of competence in this system (depression) of knowledge.

Study Type

A quantitative study using direct survey questioning works well with sensitive questions, such as the ones used in this survey (Fimian, 1988), as it is statistically more efficient in analysis (Rosenfeld et al., 2016). This approach is appropriate when research is needed to understand the relationship between variables. The purpose of this study is to examine the prevalence and intensity of stress sources and manifestation factors among Southwestern Indiana teachers, and the impact, if any, that exists between depression, anxiety, and burnout and relationships that may exist between demographics and school-based factors. This type of questioning is the most appropriate choice when a survey asks sensitive questions.

One drawback to direct questioning can be a high item nonresponse rate. Scholars have found that approximately 40% of respondents refused to answer direct questions about their views toward [sensitive topics] (Blair et al., 2013; Lyall et al., 2013). Rosenfeld et al. (2016) suggested this situation can be mitigated by building trust and rapport with respondents; however, doing so is costly. In the survey conducted through this research, there was no trust or rapport to build with the subjects based on the type of survey used and because participants were selected by simple random sampling. In the case of this survey, 185 surveys were returned. Two potential respondents did not agree with the consent form, making the total number of participants 183.

Sources

Teacher stress is a topic of broad scope, yet the research did not start until the 1970s when Kyriacou (2001) coined the phrase for his 1977 research on it (Kyriacou & Sutcliffe, 1977). Since then, researchers have identified sources of stress in educators. As noted by Smith (1999), depression is a widely studied mental illness phenomenon. While much research has focused on the idea that stress is mostly due to deadlines and test pressures, researchers such as Anderson et al. (1999) and Kyriacou (2001) are leading the way in identifying how internal and external stress can affect teachers. It is important to remember that the main sources of stress experienced by a particular teacher will be unique to him or her and will depend on the precise and complex interaction between their personality, values, skills, and circumstances (Kyriacou, 2001).

Internal Stress Source

The idea that internal stress sources can impact a teacher's level of stress and ability to deal with difficult situations is one that has no single concrete solution. When looking at various internal stresses, Anderson et al. (1999) mentioned work overload, lack of support, isolation from other adults, inadequate time for relaxation and preparation, and feeling that one's personal life is being short-changed for work. Along with these stresses, Torres et al. (2009) and Wisniewski & Gargiulo (1997) added excessive paperwork, Haydon et al. (2018) low salaries and unsupportive parents, and Wisniewski & Gargiulo (1997) the changing demands of the national curriculum. (Kyriacou (2001) found that internal teacher stress was attributed to time pressures and workload, coping with change, being evaluated by others, dealing with colleagues, self-esteem and status, rote conflict and ambiguity, and poor working conditions. Guglielmi &

Tatrow (1998) described internal stress took the form of difficult interpersonal and organizational problems and lack of autonomy. Both Anderson et al. (1999) and Kyriacou (2001) identified student apathy and lack of administrative support as sources of stress.

Each of these listed stressors are ones that impact a teacher's self, whether it be self-esteem, self-worth, or self-sufficiency. Each of these internal stressors are mostly teacher controlled, both in terms of manifestation and how to handle them, yet it does not lessen the stress level when a teacher has that control. The stress still exists internally until a solution for the problem is proposed and used and the problem goes away.

External Stress Source

The other driver for teacher stress is external stress. Coates and Thoresen (1976) identified external stress as anything a teacher has little control over, whether it be a physical stress (such a classroom size) or a mental stress (poor evaluations and subsequent meeting follow-ups). External stressors not only included violence, drugs and overcrowded classrooms, but also curriculum changes (Anderson et al., 1997). Kyriacou (2001) considered poor working conditions to be the major cause of external stress. Guglielmi & Tatrow (1998) identified external stressors as scarcity of resources, physical stressors (noise or crowding), and punishing workloads. Both Anderson et al. (1999) and Kyriacou (2001) considered discipline problems a major cause of stress. The lack of administrative or management support was also considered a factor in external stress (Anderson et al., 1999; Guglielmi & Tatrow, 1998; Kyriacou, 2001).

In the cases of external stress, teachers had little to no control regarding how they should handle issues that fall into these categories. With teachers having little local control, and governments having a thumb over that local control, most external stressors continued to become

factors in an educator's reason to leave teaching (Brasfield et al., 2019; Brevetti, 2014; Haydon et al., 2018; Sass et al., 2012). Considering that in many districts 50% of new to near new teachers leave in five years and that many urban environments experience turnover rates as high as 30%, it is no surprise that external stressors motivated many teachers to find new employment due to the level of stress (Anderson et al., 1999).

Manifestations

As teachers begin to feel the pressure, occupational stress manifests itself in many ways. Many researchers found that stress manifestations could be small annoyances such as a headache or dry mouth (Bradshaw, 1991) to major health complications from cardiovascular disorders (Bradshaw, 1991) to depression (Anderson et al., 1999; Bianchi et al., 2014; Bradshaw, 1991; Guglielmi & Tatrow, 1998, Kahn et al., 2006). After looking through the research available, the symptoms of stress break down into three categories: physical, behavioral, and mental.

Physical Manifestations

The physical symptoms of stress can manifest in many ways. The various researchers in this literature review had compiled a list of ways it can impact a person's physical health. Physical manifestations of stress can include: breathing heavy or heart-rate above 80 (Bradshaw, 1991), headache (Ansley et al., 2016; Bradshaw, 1991), muscle tension, cold feet and hands, increased sensitivity, ear ringing, light-headed or dizzy, weight gain or loss, dry mouth (Bradshaw, 1991), colds/flu/weakened immune system (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998), gastrointestinal issues, frequent urination, constipation, diarrhea, sexual problems (Bradshaw, 1991), cardiovascular changes (Guglielmi & Tatrow, 1998; Kahn et al., 2006), burnout (Bianchi et al., 2014; Guglielmi & Tatrow, 1998; Kahn et al., 2006;

Wisniewski & Gargiulo, 1997), exhaustion (Anderson et al., 1999), and ulcers and somatic complaints (Kahn et al., 2006). This exhaustive list of physical impacts can impair a person's ability to not only teach, but also live well. However, these symptoms are not the only ones that can impact a teacher's health.

Behavioral Manifestations

Behavioral manifestations of stress can affect a teacher's health even more so than physical symptoms. In fact, many of the physical manifestations can be treated, whereas the behavioral ones are not considered curable unless a self-change is made. The list of behavioral symptoms included: inattention to dress or grooming, frequent lateness, becoming more serious, nervous habits, rushing, aggressive driving, and edginess (Bradshaw, 1991), increased frustration or irritability (Bradshaw, 1991; Anderson et al., 1999), inability to be softer, rude, reduced efficiency/productivity and perfectionism (Bradshaw, 1991), insomnia/exhaustion (Anderson et al., 1999; Ansley et al., 2016; Bianchi et al., 2014; Bradshaw, 1991), frequent use of over the counter drugs (Bradshaw, 1991), increased use of drugs/alcohol/tobacco (Bradshaw, 1991; Guglielmi & Tatrow, 1998), gambling or overspending (Bradshaw, 1991), absenteeism (Anderson et al., 1999; Guglielmi & Tatrow, 1998), unhealthy eating (Bianchi et al., 2014; Guglielmi & Tatrow 1998), mood or behavior changes (Ansley et al., 2016), dissatisfaction, hyper-vigilance, fearfulness (Anderson et al., 1999), reduced personal accomplishment (Bianchi et al., 2014; Wisniewski & Gargiulo, 1997), and a sense of failure (Wisniewski & Gargiulo, 1997). Each of these behavioral manifestations can morph into a larger physical or mental symptom if the stress is not abated or eliminated.

Mental Manifestations

The last array of manifestations that can impact a teacher's health are mental symptoms. While the other two categories each have their own severities, mental health is the area that is most concerning, as it can impact a person's ability to function not only as a teacher, but also as a member of society. The mental manifestations of stress included: nervousness (Bradshaw, 1991), anxiety (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998), worry (Ansley et al., 2016; Bradshaw, 1991), guilt, moodiness, instability (Bradshaw, 1991), depression (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998; Kahn et al., 2006), pessimistic thinking, racing thoughts, problems with concentration, forgetfulness, nightmares, difficult decision making, feeling disorganized, confused, overwhelmed and/or resentful, frustration, crying, loneliness, feeling like one is never good enough, having a negative inner voice (Bradshaw, 1991), fear, dread (Ansley et al., 2016), depersonalization (Bianchi et al., 2014; Wisniewski & Gargiulo, 1997), suicidal ideation, cognitive impairment, guilt, self-blame (Bianchi et al., 2014), psychosomatic complaints, cynicism, and emotional exhaustion (Kahn et al., 2006; Wisniewski & Gargiulo, 1997). The possible outcome of these symptoms, when allowed to take control, can change a teacher's health to a point where he or she cannot function in society, a serious detriment to the health of all teachers in the United States.

The combination of physical, behavioral, or mental effects of teacher stress manifestations can affect a teacher's ability to teach. With the various forms of manifestations that can span across all three areas simultaneously, it is no surprise that teachers experience stress and strange symptoms that they cannot explain; yet, the two problems go hand in hand.

The only way to combat the symptoms of stress is to find a solution that will work based on an individual's needs.

Solutions

A teacher's stress level, whether high or low, can always use a management system to help cope with the various symptoms that can exist. There are two ways that researchers have found stress can be handled: internally or externally. With these two types of coping skills, the solutions for stress may not be as complex as what some might believe.

Internal Stress Management Solutions

The research on internal stress management solutions proposes a way to easily integrate various coping skills into a teacher's daily life. The suggestions include meditation (Anderson et al., 1999; Ansley et al., 2016; Bradshaw, 1991; Nagel & Brown, 2003), cognitive behavioral methods such as thought replacement, problem solving and mindfulness training (Ansley et al., 2016; Bradshaw, 1991), relaxation training (Ansley et al., 2016; Kyriacou, 2001), recognizing limitations (Bradshaw, 1991; Kyriacou, 2001; Nagel & Brown, 2003), and prioritizing problems (Bradshaw, 1991). Also, creating narratives can offer a form of healing and knowing, where storytelling becomes a transformative type of therapy that can become a useful source for loved ones wanting to have a better sense of how depression affects the individual (Smith, 1999).

While some of these steps are easy enough to do without training, such as recognizing limitations, others, such as meditation and mindfulness training, may require instruction from a professional. In such cases, if a school wishes to take a preventative measure against stress, having a specialist on hand for meditation or mindfulness training can preemptively remove and redirect stress before symptoms manifest (Anderson et al., 1999; Nagel & Brown, 2003).

External Stress Management Solutions

Another way to cope with teacher stress was to identify the external stress management solutions that are available. The simplest of all the external methods was to quit teaching (Dunn et al., 2016). While this was the least desired of the solutions for those who really want to continue teaching, it was the quickest way to eliminate stress that does not require any internal training or any external help. Other external solutions for stress management at home included exercise (Ansley et al., 2016; Bradshaw, 1991), diet, and limiting TV (Bradshaw, 1991). Some suggestions for the school environment included sharing the problems (Bradshaw, 1991), creating a climate of good communication and whole school policies, providing positive feedback, providing resources and support, creating easy to follow policies, minimizing red tape, matching duties to staff, and creating a pleasant work environment (Kyriacou, 2001). Nagel and Brown (2003) suggested sharing decision making with staff/administration, and training mentor teachers on how to model stress management techniques. Kahn et al. (2006) cited identifying stress early and creating early interventions a key factor in limiting stress.

Although most of the external coping skills required a change to some degree, whether internally or externally, these changes could completely eradicate many of the common stressors that teachers faced (Bradshaw, 1991). When teachers could cope with the stressors in their professional lives, their homes also benefited from this stress reduction.

A teacher's health could be compromised quickly through various stressors that occur naturally while in a teaching environment. After identifying the stressors that occur while teaching, it is important to identify the physical, behavioral, and mental manifestations that

transpire from stress. While all symptoms may not be abated from varying stress reduction techniques, the research suggested that meditation, self-directed stress management plans, (relaxing training or mindfulness training), and resigning from the position are all possible outcomes to decrease or totally eliminate the depression, anxiety, and burnout that comes from teaching.

After looking at all the research available, there is ample information to answer the research question of how stress and teaching are correlated and how it can impact teaching. The lack of information specifically in terms of teachers working in Southwestern Indiana, is a gap in the literature. The lack of data in this area suggests that further research should be done to pinpoint how depression, anxiety, and burnout impact Southwestern Indiana teachers and the manifestations it causes. More importantly, after identifying these issues, a district can use the analysis to identify their targeted areas for increasing retention, reducing stress, and maintaining a healthy teaching environment.

Chapter 3: Methodology

Overview

This chapter was designed to discuss the research methodology for this quantitative study on stress sources and manifestations in Southwestern Indiana teachers. This chapter outlines the research methodology by discussing the research questions, sample, instrumentation, data collection procedures, data analysis, and timeline. This study identified sources of teacher stress and its manifestations as related to school-based factors using the following procedures:

1. 11 counties in Southwestern Indiana were included in the sample where participants were selected through simple random sampling.
2. Teacher stress levels that lead to depression, anxiety, and burnout due to school-based factors were collected using Fimian's Teacher Stress Inventory Survey (1988).
3. Survey data was calculated using both descriptive and correlational analysis.

Statement of the Problem

Occupational stress can impact physical and psychological wellbeing of teachers (Johnson et al., 2005). While the concept has been studied for over 50 years, there is a lack of research identifying the stressors of education in relation to depression, anxiety, and burnout in teachers working in Southwestern Indiana. Some researchers have attempted to focus on specific areas of study, such as the mid-south, Texas, or South Carolina (Brasfield et al., 2019; Gonzalez et al., 2017; Torres et al., 2009). Other researchers have identified specific teacher stressors, such as legislative policies (Brevetti, 2014; Haydon et al., 2018; Sass et al., 2012), vocational influences, such as paperwork (Anderson et al., 1999: Torres et al., 2009; Wisniewski & Gargiulo, 1997) or inadequate prep time (Anderson et al., 1999; Shernoff et al., 2011), and

personal characteristics, such as age (Hughes, 2006), but the research lacks focus in specific areas of connected geographical locations based on districts. This research intends to identify prevalent work-based stressors, including frequency and intensity, which contribute to teacher depression, anxiety, and burnout, as well as the prevalent manifestations of well-being and health in Southwestern Indiana.

Research Questions

The purpose of this study is to identify sources of teacher stress and their manifestations by answering the following research questions:

Research Question 1. What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers?

Research Question 2. What sources of stress are prevalent among Southwestern Indiana teachers?

Research Question 3. What manifestations of stress are prevalent among Southwestern Indiana teachers?

Research Question 4. Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 5. Are the sources of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 6. Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

The Research Design

This quantitative research project utilized survey questions asking about educator depression, anxiety, and burnout with a focus on teacher stress sources and manifestations. Quantitative research provides a rich set of data for the type of analysis necessary when detailing the compounding issues in education. Using a positivist paradigm, this study will help guide scientific discovery though findings that support scientific study and identify gaps in evidence. The positivism paradigm seeks to find where relationships derive from between casual and explanatory factors and outcomes, focusing on explanation and prediction. The positivist paradigm utilizes large data samples to make generalizations and does not require the researcher to interact with the participants. Within this research, the researcher will be an objective observer. A quantitative research study is most appropriate (Lincoln et al., 2017; Park et al., 2020).

The purpose of using survey research is to include a large sample of data in the collection process. The research survey, consisting of 52 questions, will also have a demographic component that requires relationship analysis. Survey research is a rigorous approach to research with scientifically proven statistical consistency as based in much of Fimian's (1988) survey and validation research (Ponto, 2015).

Methods

The article selection process required the use of *EBSCO* host digital platform, Elsevier publishing company, *FUSIson*, *Google Scholar, JSTOR* digital library, and *ProQuest Central*. Keywords for the research included: stress, depression, teacher, educator, Midwest, burnout, anxiety, medicated, stress solutions, and K-12. To find suitable research specifically relating to

American teacher stress, over 150 articles were reviewed with 52 pieces of literature chosen that focus on common themes that relate to educator stress, manifestations, and solutions. Articles that research foreign country educational practices or teachers and higher education were not used in this literature review. The articles were then sorted into various categories based on their content: sources, manifestations, and solutions. From there, the sources were categorized based on external or internal stress. The manifestations were divided based on physical, emotional, and mental. Lastly, the solutions were separated based on internal or external stress management tools.

Sample

To collect the necessary survey data, research took place in Southwestern Indiana school districts for grades K-12. This region contains 11 counties: Daviess, Dubois, Gibson, Knox, Martin, Perry, Pike, Posey, Spencer, Vanderburgh, and Warrick. Within the counties, 25 public school districts, a mix of urban, suburban, and rural schools, were included in the sample (Appendix A). No private or charter schools were selected as their state and federal mandates, including budget and potential student pool, differ from those of public schools. Choosing this group of teachers allowed for similar student and teacher backgrounds in relation to the area where they live and work. Each of these districts are part of a greater southwestern area, which is geographically roughly one hour away from the largest urban city where the metro area exceeds 181,000 people (United States Census, 2019). While many of the counties surrounding the metro area are rural, the larger metro area serves many teachers. Due to its location, many of the rural districts interact with the urban district for sports, events and general everyday business. Student district populations in these 25 districts range in size from a few hundred students to several

thousand. Many other districts in Southwestern Indiana were eliminated due to their proximity to other urban metro areas and their distance of over one hour from the urban metro area selected to participate in the sample. The sample included 2,784 email addresses for K-12 teachers in the 25 noted districts with 1,392 emails selected for simple random sample.

Instrumentation

Teacher Stress Inventory Survey and Demographic Questionnaire. Using the "Teacher Stress Inventory" or TSI written by Fimian (1988) (Appendix B), teachers answered Likert scale questions of one to five based on their perceptions, personal feelings, and manifestations about the profession. The survey author, Fimian (1988), created a survey that reflected on educational depression, anxiety, stress, and burnout. This survey had been piloted by the survey author, as well as used by other researchers in the field of education, and was validated (Fimian, 1984; Fimian, 1988; Fimian & Fastenau, 1990). The survey is 52 questions of Likert scale answers (one to five), which covers stressors and manifestations of depression, anxiety, and burnout. The TSI produces a Total Stress Score. The Total Stress Score calculates the average of each trigger of stress (time management, work-related stressors, professional distress, discipline and motivation, and professional investment) and the average of the manifestations of stress (emotional, fatigue, cardiovascular, gastronomical, and behavioral. (Fimian, 1988). Permission was obtained by the author to use this survey for the research being conducted (Appendix C).

The survey also included seven demographic questions, which detailed the teacher's personal status in gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level to help determine if relationships existed between any of the variables. Including a demographic questionnaire helped create data groups based on

the demographic information from the survey. Data analysis from descriptive and correlational analysis was created to compare the survey data from the various demographics existing among Southwestern Indiana teachers. This demographic survey helped identify characteristics of this teacher population in Southwestern Indiana.

Survey Validity. Fimian's survey is a validated instrument to measure the frequency and strength of occupational stress in teachers (Fimian & Fastenau, 1990). A 30-item short form of the Teacher Stress Inventory (TSI) was created with 12 conceptually similar questions added. Also, a 63-item instrument was rated on a four-point relevancy system. The relevant means for each item was developed and one item deleted that was rated less than moderately relevant. The remaining 41 items were used in subsequent factor analysis of four other data samples. The factor analysis with varimax and oblique rotations resulted in six strength and six frequency subscales of job-related stress for a total of 12 subscales in the two categories of stress strength and frequency (Fimian, 1984; Ponto, 2015).

Survey Reliability. Each of the two categories, stress strength and frequency, were found to be meaningful and reliable in terms of subscale internal consistency reliability. Based on content validity from the original data, subscale relevance means, and percentages of agreement and disagreement were used to determine the relevancy of the items to the general concepts of teacher stress. The indices indicated that the Teacher Stress Inventory (TSI) items were at least moderately related to stress, the TSI subscale was at least quite relevant to stress, and that over seven of every 10 raters concurred the items were relevant to very relevant to stress (Fimian, 1984; Fimian & Fastenau, 1990).

Data Collection Procedures

Teacher email addresses were available as public information through the Department of Education's website and individual school corporations. Because of the large number of participants in grades K-12 in Southwestern Indiana, probability sampling ensured a large pool and a fulfillment of the sample diversity while giving each participant an equal chance of being chosen. Based upon Indiana Department of Education's *INview* (2021), the number of teachers was estimated at 4,733 Southwestern Indiana teachers spread across 26 school districts. However, only 2,784 email addresses in 25 districts were obtained due to the process of district approval and principal consent. Through simple random sampling, a Qualtrics XM survey (Qualtrics, Provo, UT) was sent via email to half of the teachers (1,392) in the demographic area to be studied creating the sample. As for survey response return, the anticipated expected return rate was 10% (139). Participant exclusion was not needed or anticipated as a full diverse representation was needed.

Through simple random sampling, email addresses were arranged alphabetically in a document with numbers 0001 – 2,784 assigned to each email address in descending order. Using a random number generator (Stat Trek, 2021), 1,392 random numbers were selected with no repeats allowed. The 1,392 emails were collected into the Google email system for survey information distribution.

A survey (Appendix B) was developed using Qualtrics XM (Qualtrics, Provo, UT). Once the Institutional Review Board (IRB) approved the research (Appendix D), the survey and questionnaire were distributed to the predetermined 1,392 in October of 2021. Embedded in the survey was the Ethics and Informed Consent section (Appendix E), as completion of the survey

was at the participant's consent. The survey was sent to 1,392 teacher participants in Southwestern Indiana to generate the sample.

Prior to submitting the Institutional Review Board (IRB) Application Form to the Institutional Review Board (IRB) review committee at the University of Southern Indiana, school district email addresses belonging to the participants were selected through simple random sampling. After the Institutional Review Board (IRB) project was approved, these email addresses were loaded into Google's email program and a recruitment letter (Appendix F) was sent out with the appropriate Qualtrics link. An ethics and informed consent statement (Appendix E) was embedded into the Qualtrics XM survey (Qualtrics, Provo, UT), detailing the researcher, university, faculty supervisor, purpose of the study, and risks associated with the survey. Once the email link was sent out, survey participants had four weeks to complete the survey. After one week, a reminder email was sent to each selected participant who had not completed the survey based on the data collection from Qualtrics. This process was repeated at the beginning of the third week.

The participant was asked to complete a survey of 15 minutes, one time only. Participants were allowed to withdraw by not completing the research questions or not submitting answers. A "Withdraw from Survey" button was available on the survey for those wishing to withdraw while taking the survey.

Informed consent was indicated on the second page of the survey, asking subjects to agree to the survey conditions, and to complete the survey as their consent. Participants had the option to not agree with the consent form and exit the survey. No email data was collected from the returned surveys nor did the participant have a place to provide short answers, indicating

identifying information. The participant's well-being was protected by the anonymity of the returned survey. The data was and will be stored in the Qualtrics XM program (Provo, UT) and Statistical Package for Social Sciences (IBM SPSS Statistics Version 28) program. The device that stores this data is password protected and a personal device. After five years, the data will be destroyed by deleting the files and survey data.

Data collection for the Qualtrics XM Survey (Qualtrics, Provo, UT) was downloaded from the program into IBM SPSS Statistics (Version 28). The data variables consisting of the work-stressors, manifestations, and demographics were analyzed.

Data Analysis

The purpose of this study was to collect data to measure the prevalence and intensity of stress sources and manifestation factors in Southwestern Indiana teachers. This study further identified the sources and manifestations of stress as well as the sources and manifestations as related to demographic variables, including gender, education, environment, age, number of students taught, and years taught. The data collected was run through IBM SPSS Statistics (Version 28) and analyzed for descriptive data analysis and multiple regression analysis as a predictor for dependent variables (noted in the survey as Time Management, Work-Related Stressors, Professional Distress, Discipline and Motivation, and Professional Investment Emotional Manifestations, Fatigue Manifestations, Cardiovascular Manifestations, Gastronomical Manifestations, and Behavioral Manifestations) on the independent demographic variables (gender, number years taught, teaching environment, age, number of students taught, grade level taught, and education level).

Research Question 1. What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers? This research question was used to report the Total Stress Score of frequency and intensity of stress and its manifestations using descriptive statistics. As the variables were used as scale data, the mean and standard deviation was reported. A five-point scale (No Strength/Not Noticeable to Major Strength/Extremely Noticeable) was used and interpreted as ratio data, where a true zero, or absence of strength, exists (Willits, Theodori, & Luloff, 2016). IBM SPSS Statistics Version 28 was for this analysis. Since a total score was calculated, any survey item left blank in the stress or manifestations section or demographic section voided all responses and was not used as part of the descriptive statistics.

Research Question 2. What sources of stress are prevalent among Southwestern Indiana teachers? This research question was used to report the prevalent sources of stress using descriptive statistics. As the variables were used as scale data, the mean and standard deviation was reported. A five-point scale (No Strength/Not Noticeable to Major Strength/Extremely Noticeable) was used and interpreted as ratio data, where a true zero, or absence of strength, exists (Willits, Theodori, & Luloff, 2016). IBM SPSS Statistics Version 28 was used for this analysis. Any survey item left blank in the stress or manifestations section or demographic section voided all responses and was not used as part of the descriptive statistics.

Research Question 3. What manifestations of stress are prevalent among Southwestern Indiana teachers? This research question was used to report the prevalent manifestations of stress using descriptive statistics. As the variables were used as scale data, the mean and standard deviation was reported. A five-point scale (No Strength/Not Noticeable to Major Strength/Extremely Noticeable) was used and interpreted as ratio data, where a true zero, or

absence of strength, exists (Willits, Theodori, & Luloff, 2016). IBM SPSS Statistics Version 28 was for this analysis. Any survey item left blank in the stress or manifestations section or demographic section voided all responses and was not used as part of the descriptive statistics.

Research Question 4. Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level? This study was used to determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught or education level predicted the total stress score. To determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level predicted a total stress score, multiple regression analysis was used to seek the degree of relationship exhibited by the dependent variable (stress and manifestation factors) because of the independent variables (demographics). Multiple regression is a statistical test that assumes the data is parametric with normal distribution (Shaw & Wheeler, 1994). This type of statistical test allows the researcher to assess the relationship strength between the dependent variable and the independent variable, and the importance of each of the predictors to the relationship.

Research Question 5. Are the sources of stress related to gender, number years taught, teaching environment, age, number of students taught, grade level taught, or education level? This study was used to determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level predicted the sources of stress. To determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught or education level predicted the stress source score, multiple regression analysis was used to seek the degree of relationship exhibited by the dependent variable (stress

and manifestation factors) because of the independent variables (demographics). Multiple regression is a statistical test that assumes the data is parametric with normal distribution (Shaw & Wheeler, 1994). This type of statistical test allows the researcher to assess the relationship strength between the dependent variable and the independent variable, and the importance of each of the predictors to the relationship.

Research Question 6. Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level? This study was used to determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level predicted the manifestations of stress. To determine if gender, number of years taught, teaching environment, age, number of students taught, grade level taught or education level predicted the manifestation score, multiple regression analysis was used to seek the degree of relationship exhibited by the dependent variable (stress and manifestation factors) because of the independent variables (demographics). Multiple regression is a statistical test that assumes the data is parametric with normal distribution (Shaw & Wheeler, 1994). This type of statistical test allows the researcher to assess the relationship strength between the dependent variable and the independent variable, and the importance of each of the predictors to the relationship.

Ethical Considerations

Each participant was responsible for providing his or her own consent by completing the survey. The survey involved no more than minimal risk to the subjects. The risk of the survey did not cause a magnitude of harm or discomfort greater than those ordinarily encountered in daily life

or during the performance of routine physical or psychological examinations or tests. No incentives were provided to complete the survey.

Assumptions

As no names were attached to the data collected, it was assumed that survey results were reliable and valid from the anonymous responses. It was assumed that each participant would engage in this study honestly.

Limitations

This research is subject to various limitations. As with any study, limitations of exact replication are possible. Various types of bias can limit this research. Factors such as lack of internet access, question sensitivity, sampling bias, low response rates, and missing surveys can affect survey reliability (Nardi, 2018).

The timing of the study (at the beginning of the school year in October of 2021) may also prove to be a limitation based on teacher responses and feelings of stress and burnout, as opposed to completing this study at the end of the year. Other considerations for lack of participation may include previous commitments, lack of time, lack of stress or manifestations of stress, or an unwillingness to complete a survey that is not mandatory. Lastly, the survey permission information was submitted to one district that required principal consent. It had a low response rate, contributing to another possible limitation of the study.

The coronavirus (COVID-19) pandemic, declared by the World Health Organization on March 11th, 2020 (World Health Organization, 2020), may also limited the study. At the onset of schools closing in March of 2020, many schools did not reopen their doors to in-person, face-to-face learning full-time during the 2020-2021 school year. District choices to begin the 2020–

2021 school year varied among remote instruction, hybrid-instruction, face-to-face instruction, or a combination of all three. The resulting inconsistent scheduling, unprecedented learning style, and possible quarantining may have impacted and limited this study.

Delimitations

Based on the large number of counties in Indiana's Southwestern region, careful consideration was taken in identifying counties that would fit the identity of the districts that make up this region. Based upon the impact of geographical distance, television projection, and large-city status, counties that considered the most populous city the "hub" were targeted in the identification of "Southwestern Indiana teachers." These districts were also subjected to the same or similar state and federal regulations. The participants were selected through simple random sampling to ensure a truly random and diverse sample of teachers selected to represent Southwestern Indiana teachers. The timing (October 2021) was a delimitation to the research in that the time this survey was conducted may have impacted the results.

Summary

The goal of this chapter was to outline the research method used to answer the research questions presented. A discussion of the research design, including, sample, instrumentation, data collection procedures, data analysis, timeline, ethical considerations, assumptions, limitations, and delimitations were key components in this chapter, as well as a copy of the survey (Appendix B), permission to conduct research from the survey author (Appendix C), Institutional Review Board (IRB) Approval Letter (Appendix D), ethics and informed consent statement (Appendix E), and recruitment letter (Appendix F). A positivist paradigm and quantitative methodology was used to answer the research questions pertaining to teacher

depression, anxiety, and burnout in Southwestern Indiana teachers. Examining the relationship among teacher depression, anxiety, and burnout, manifestations, and demographics will help open the doors of research and communication between teacher struggles and their untold realities, while providing districts data to support teacher retention, reduce stress, and promote healthy work environments. Without a clear understanding of how many teachers are affected and to what extent, those that make decisions pertaining to education practices continue to compound the difficulties faced by educators each day.

Chapter 4: Presentation of Findings

Introduction

The purpose of this quantitative study is to determine the prevalence and intensity of occupational stress sources and manifestations in Southwestern Indiana teachers. This chapter presents the data collected concerning total stress score, sources of stress, and manifestations related to occupational stress. The Teacher Stress Inventory survey provided to the sample subjects focused on six research questions.

Research Questions

Research Question 1. What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers?

Research Question 2. What sources of stress are prevalent among Southwestern Indiana teachers?

Research Question 3. What manifestations of stress are prevalent among Southwestern Indiana teachers?

Research Question 4. Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 5. Are the sources of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 6. Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

The data analysis used descriptive statistics for research questions 1-3, specifically means and standard deviations to describe the distributions for each of the factors for the Total Stress Score intensity, the sources of stress, and the manifestations of stress. The data analyses used for research questions 4-6 were one-way ANOVA tests to see if demographic variables were predictors of the Total Stress Score, sources of stress or manifestations of stress. IBM SPSS Statistics Version 28 was used to analyze all data. All data was analyzed at the $p < 0.05$ level of significance.

This research study sent invitations to 1,392 (n = 1,392) public school teachers in 25 districts from 11 counties in Southwestern Indiana. Of 1392 email addresses, 88 emails were returned and were rejected. Of the valid 1,304 email addresses, the responding sample was 185 (13.29%) and the data-generating sample was 183 (13.15%). Two participants rejected the consent form and did not complete the survey, bringing the respondent total to 183.

Demographic Data

As seen in Figure 1, most respondents (n = 147, 80.33%) were female. In terms of years taught, 109 respondents (59.5%) were within their first 15 years of teaching (0-5 years, n = 36, 19.7%; 6-10 years, n = 38, 20.77%; 11-15 years, 35, 19.13%). Figure 2 shows this breakdown for all respondents' years taught. 124 (n = 124) respondents, as seen in Figure 3, identified their district as rural (67.76%). Figure 4 shows 30.6% of respondents (n = 56) were between 31-40. 71% of respondents had either 1-50 students (n = 65) or 101-150 students (n = 65) as seen in Figure 5. Elementary school (K – 5) respondents (n = 74, 40.44%) were the majority demographic of grade level taught, as seen in Figure 6. As referenced in Figure 7, most respondents (n = 96, 52.46%) in Southwestern Indiana hold a master's degree.

Figure 1

Gender Demographics

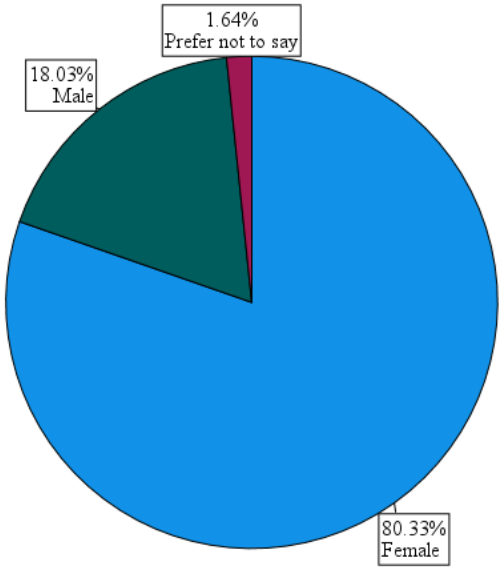


Figure 2

Years Taught Demographics

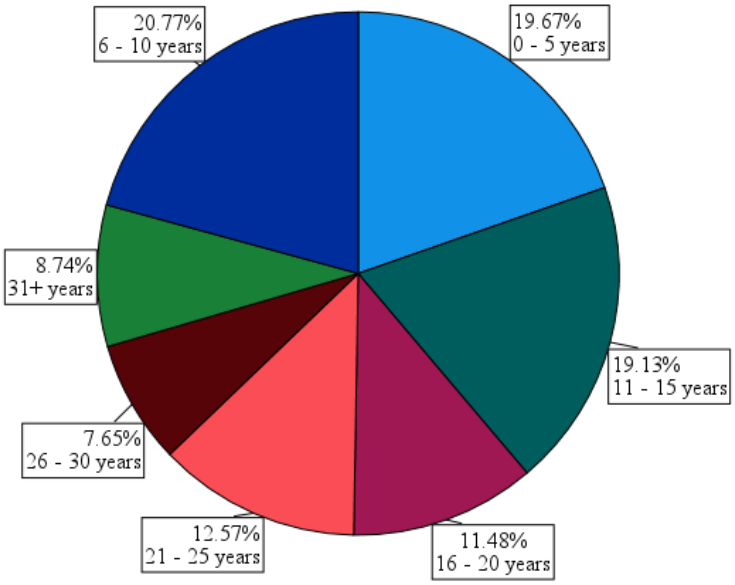


Figure 3

Teaching Environment Demographics

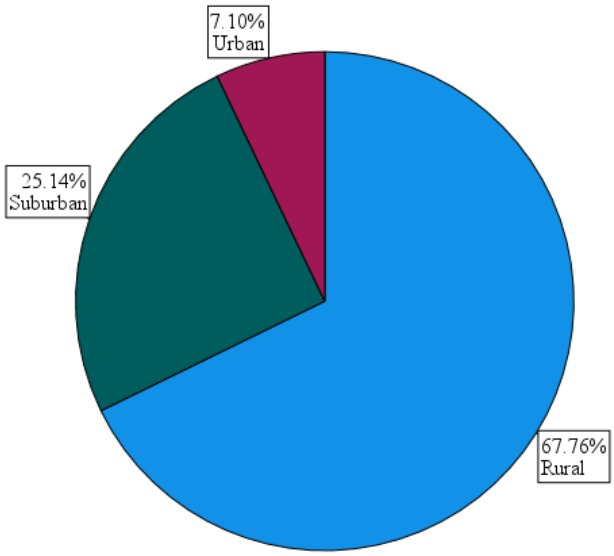


Figure 4
Age Demographics

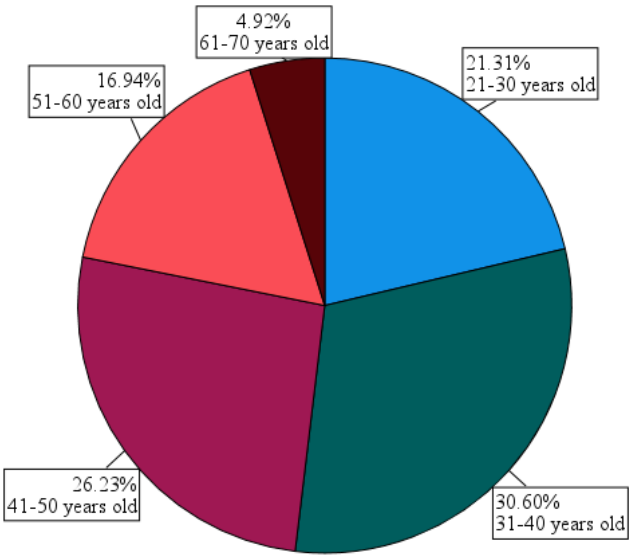


Figure 5

Number of Students Demographics

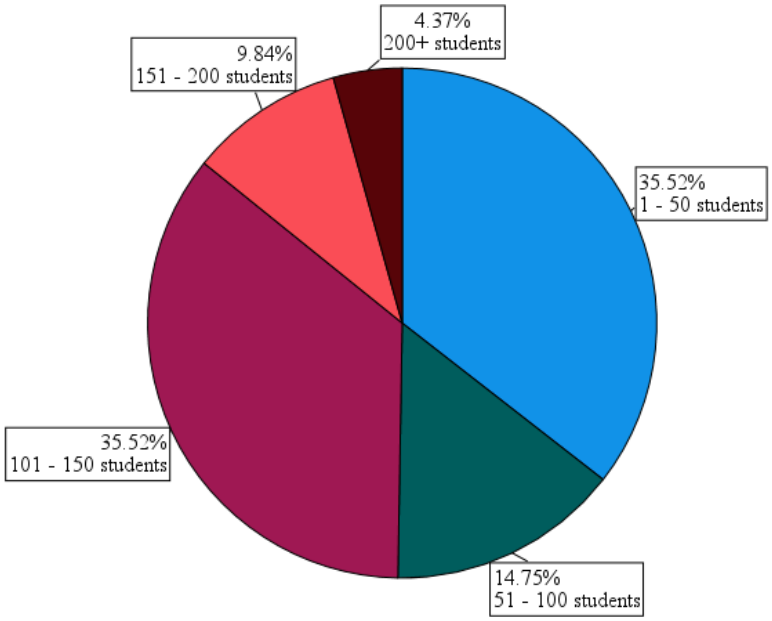


Figure 6

Grade Level Taught Demographics

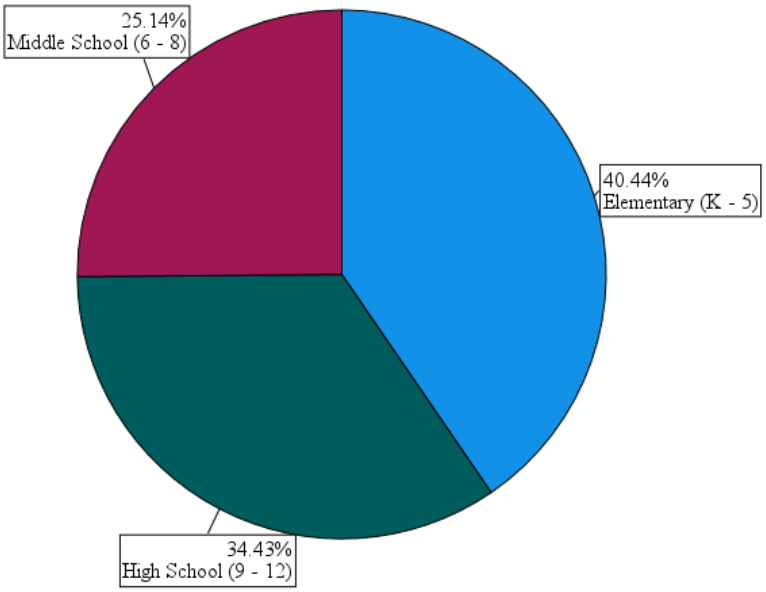
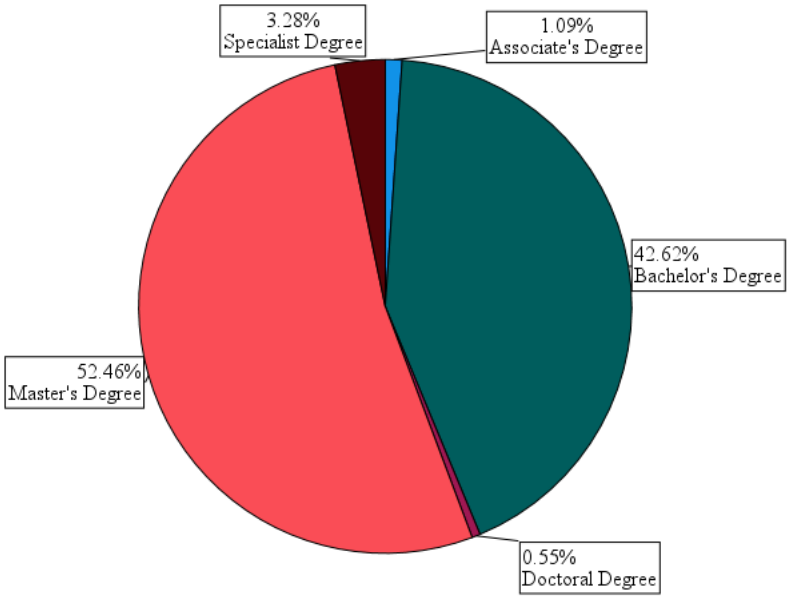


Figure 7

Education Level Demographics



Analysis of Research Questions

Data for this study were compiled from the Teacher Stress Inventory (TSI) instrument and various statistical methods were used to analyze the data. Based on Fimian's manual (1988), the subscale scores for each factor (stressors or manifestations) can range from 1-5. The total stress score can be calculated from each factor's average score. The TSI data were collected from 49 five-point Likert scale questions:

1 = represented no strength, not noticeable

2 = mild strength, barely noticeable

3 = medium strength, moderately noticeable

4 = great strength, very noticeable

5 = major strength, extremely noticeable

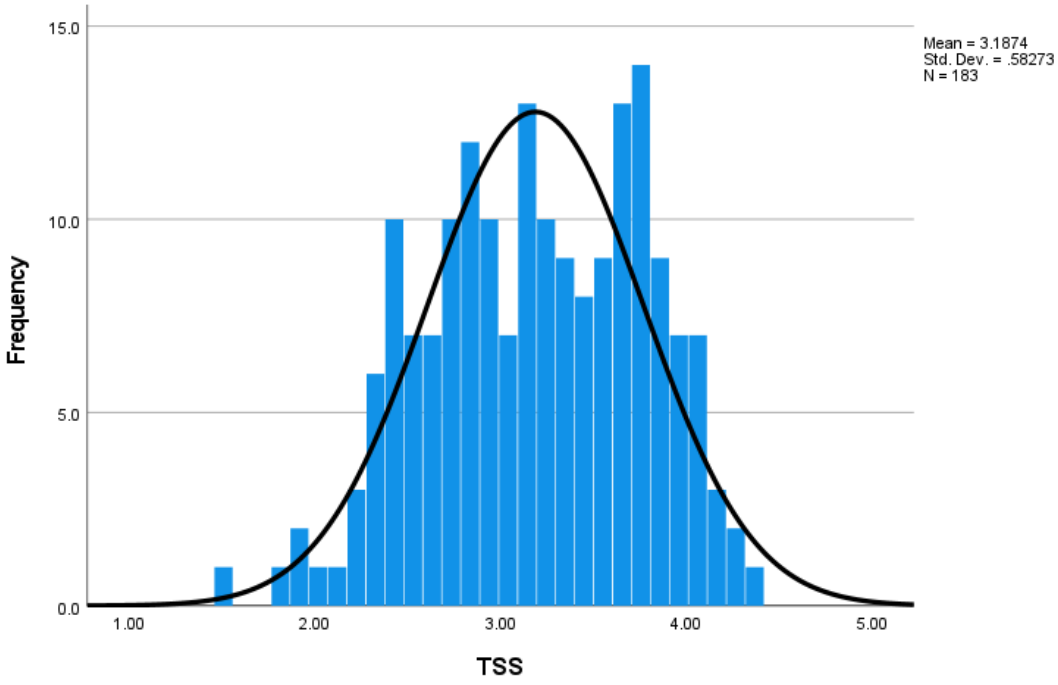
Research Question 1

What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers?

For research question one, descriptive statistics were used to generate means and standard deviations to answer the question. The Likert Scale raw total stress score mean was 3.18 (as per Fimian's 1988 Teacher Stress Inventory, moderate stress intensity is 1.94 - 3.27) and a standard deviation of 0.58. Fimian's Teacher Stress Inventory (TSI) (1988) showed a normative sample of 3.18 falls in the 80 – 89 decile range, higher than the average of 50 based on Fimian's TSI manual. It is worth noting that the decile ranges vary based on averages in each factor and were not consistently numeric where a 1.0 is below average and 4.0 is above. While the total stress score fell in the lower end of the medium to great strength or moderately to very noticeable intensity, the decile score revealed it was above average. Figure 4.8 shows the raw Total Stress Score distribution. The histogram, with an overlay of the normal curve, shows a normal distribution.

Figure 8

Distribution of Raw Total Stress Score TSS



Research Question 2

What sources of stress are prevalent among Southwestern Indiana teachers?

For research question two, descriptive statistics were used to generate means and standard deviations to answer the question. Based on the raw score means, the most prevalent sources of stress were work-related stressors with a mean score of 3.92 (medium to great strength or moderately to very noticeable) and a standard deviation of 0.74 and time management with a mean score of 3.78 (medium to great strength or moderately to very noticeable) with a standard deviation of 0.62. Based on Fimian's Teacher Stress Inventory (TSI) (1988) normative sample, 3.92 falls in the 70-79 decile range or above average, which is 50 per Fimian TSI manual (1988).

Each additional stress factor (professional distress, discipline, and motivation and professional investment) were slightly above the decile average.

Table 1

Descriptive Statistics for Sources of Stress

TSI Stress Factors	Decile	Mean	SD
Time management	70-79	3.78	0.62
Work-related stressors	70-79	3.92	0.74
Professional distress	60-69	3.54	0.95
Discipline and motivation	70-79	3.54	0.95
Professional investment	50-59	2.7	0.91

Analyzing the time management data further, Table 2 shows the breakdown of each sub-question's mean and standard deviation. Teachers indicated the most prevalent work-related stressors were "There is too much work to do," and "My personal priorities are shortchanged due to time demands." Fimian's TSI (1988) norms and interpretations indicate a great to major strength or very to extremely noticeable intensity.

Table 2

Descriptive Statistics for the Sources of Stress in Work-Related Stressors: Sub-questions in Q2

Work-Related Stressors Q2	Mean	SD
There is little time to prepare my lessons/responsibilities.	4.12	0.88
There is too much work to do.	4.39	0.83
My pace of the school day is too fast.	3.68	1.18
My caseload/class size is too big.	3.7	1.12
My personal priorities are shortchanged due to time demands.	4.2	0.93
There is too much administrative paperwork in my job.	3.41	1.22

Table 3 presents the stress factor with the second greatest intensity, Time Management, and shows two sub-questions with great or major strength to major or extremely noticeable intensity. Teachers indicated the more prevalent stressors of time management were, “There isn’t enough time to get things done,” and “I have little time to relax/enjoy the time of day.” Each sub-question for work-related stressors had a mean above medium strength or moderately noticeable intensity.

Table 3

Descriptive Statistics for the Sources of Stress in Time Management Stressors:

Time Management Stressors Q1	**Mean**	**SD**
I easily over-commit myself.	3.80	0.92
I become impatient if others do things too slowly.	3.11	1.10
I have to try doing more than one thing at a time.	3.80	1.98
I have little time to relax/enjoy the time of day.	4.15	0.95
I think about unrelated matters during conversations.	3.46	1.12
I feel uncomfortable wasting time.	3.98	1.05
There isn't enough time to get things done.	4.56	1.05
I rush in my speech.	3.38	1.12

Research Question 3

What manifestations of stress are prevalent among Southwestern Indiana teachers?

For research question three, descriptive statistics were used to generate means and standard deviations to answer the question. In Table 4, based on the raw score means, the most prevalent manifestations were emotional manifestations with a mean score of 3.10 (medium strength or moderately noticeable prevalence) and a standard deviation of 1.14 and fatigue manifestations with a mean score of 3.08 (medium strength or moderately noticeable prevalence) and a standard deviation of 0.91. Based on Fimian’s TSI (1988) normative sample, 3.10 falls in

the 60-69 decile range, which is slightly above average (50), whereas fatigue falls in the 70-79 decile range. The manifestation of fatigue's mean at 3.08 was also at a medium strength or moderately noticeable prevalence with a standard deviation of 0.91. The last three factors, cardiovascular, gastronomical, and behavioral manifestations all had means below medium strength or moderately noticeable prevalence but scored above average in decile.

Table 4

Descriptive Statistics for the Manifestations of Stress

TSI Manifestation Factors	Decile	Mean	SD
Emotional	60-69	3.10	1.14
Fatigue	70-79	3.08	0.91
Cardiovascular	70-79	2.61	1.22
Gastronomical	70-79	2.11	1.24
Behavioral	80-89	1.83	0.83

Looking at a breakdown of each sub-question in the emotional factor, Table 5 shows the mean and standard deviation as indicated by teachers. For stress manifestations, teachers indicated they most often respond to stress by feeling anxious, depressed and insecure. Teachers also felt mild to medium strength or barely to moderately noticeable prevalence of emotional manifestations by feeling vulnerable and unable to cope.

Table 5

Descriptive Statistics for the Manifestations of Stress in Emotional Manifestations:

Emotional Manifestations Q6	Mean	SD
Due to my job, I respond to stress by feeling insecure.	3.03	1.34
Due to my job, I respond to stress by feeling vulnerable.	2.83	1.30
Due to my job, I respond to stress by feeling unable to cope.	2.97	1.43
Due to my job, I respond to stress by feeling depressed.	3.04	1.38
Due to my job, I respond to stress by feeling anxious.	3.94	1.20

Table 6 presents the manifestation factor with the second greatest intensity, fatigue, showing two sub-questions with medium to great strength or moderately to very noticeable intensity. Teachers indicated the most prevalent emotional manifestations were, “Due to my job, I respond to stress with physical exhaustion,” and “Due to my job, I respond to stress by becoming fatigued in a very short time.”

Table 6

Descriptive Statistics for the Manifestations of Stress in Fatigue Manifestations:

Fatigue Manifestations Q7	**Mean**	**SD**
Due to my job, I respond to stress by sleeping more than usual.	2.44	1.39
Due to my job, I respond to stress by procrastinating.	2.93	1.23
Due to my job, I respond to stress by becoming fatigued in a very short time.	3.54	1.30
Due to my job, I respond to stress with physical exhaustion.	3.82	1.14
Due to my job, I respond to stress with physical weakness.	2.67	1.26

Research Question 4

Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

For research question four, the first assumption of normality was checked using Shapiro-Wilk tests. Levene’s test of equality of variances was used to check for the assumption of homogeneity of variances. When both assumptions were met, one-way ANOVA analyses were performed to test for significant main effects. When a significant main effect was detected, post-hoc analyses were performed using Tukey’s tests for pairwise comparisons. Means and standard deviations were reported for each group in all the respective analyses. Statistical significance was

assumed at an alpha value of 0.05 and all analyses were performed using IBM SPSS Statistics Version 28.

For research question four, a statistically significant main effect was detected for gender, $F(2,180)=7.18$, $p=0.001$. Post-hoc testing showed a significant difference, with females rating significantly higher than males on the TSS, as seen in Table 7. In terms of number of years teaching, a statistically significant effect was not detected, $F(6,176)=0.44$, $p=0.85$. For teaching environment, a statistically significant effect was not detected, $F(2,180)=0.35$, $p=0.70$. Age, also, did not have a statistically significant effect detected, $F(4,178)=1.23$, $p=0.30$. The number of students in a class did not have a statistically significant effect detected, $F(4,178)=1.31$, $p=0.27$. The grade level a teacher taught did not have a statistically significant effect detected, $F(2,180)=0.13$, $p=0.88$. The last demographic, education level, did not have a statistically significant effect detected, $F(4,178)=0.65$, $p=0.63$.

Table 7

ANOVA – Total Stress Score and Demographics

Variable/Level	Mean (SD)	p-value
Gender		
Female	3.26 (0.58)	
Male	2.85 (0.49)	0.001*
Number of Years Taught		
0-5 years	3.28 (0.54)	
6-10	3.25 (0.55)	
11-15	3.11 (0.70)	
16-20	3.10 (0.60)	
21-25	3.13 (0.53)	
26-30	3.21 (0.40)	
31+ years	3.16 (0.70)	0.85
Teaching Environment		
Rural	3.16 (0.58)	
Suburban	3.25 (0.59)	
Urban	3.19 (0.60)	0.70
Age		
21-30	3.24 (0.53)	
31-40	3.25 (0.65)	
41-50	3.18 (0.51)	
51-60	3.12 (0.55)	
61-70	2.82 (0.58)	0.30
Number of Students		
1-50	3.12 (0.60)	
51-100	3.07 (0.53)	
101-150	3.22 (0.58)	
151-200	3.42 (0.58)	
201+	3.24 (0.65)	0.27
Grade Level		
Elementary (K-5)	3.16 (0.55)	
Middle School (6-8)	3.20 (0.57)	
High School (9-12)	3.20 (0.63)	0.88
Education Level		
Associate degree	3.35 (0.38)	
Bachelor's Degree	3.21 (0.60)	
Master's Degree	3.18 (0.56)	
Specialist Degree	2.83 (0.88)	
Doctoral Degree	3.27 (0.00)	0.63

Note: * $p < 0.05$, statistically significant

Research Question 5

Are the sources of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

The assumption of normality was checked using Shapiro-Wilk tests for research question five. Levene's test of equality of variances was used to check for the assumption of homogeneity of variances. One-way ANOVA analyses were performed to test for significant main effects when both assumptions were met. When a significant main effect was detected, post-hoc analyses were performed using Tukey's tests for pairwise comparisons. For each group, means and standard deviations were reported in all the respective analyses. Statistical significance was assumed at an alpha value of 0.05 and all analyses were performed using IBM SPSS Statistics Version 28.

For research question five, a statistically significant main effect was detected for gender, $F(2,180)=4.45$, $p=0.013$. Post-hoc testing, as seen in Table 8, showed a significant difference, with females rating significantly higher than males on the TSS sources of stress. In terms of number of years taught, no statistically significant effect was detected, $F(6,176)=0.67$, $p=0.68$. For teaching environment, a statistically significant effect was not detected, $F(2,180)=0.29$, $p=0.75$. Age, also, did not have a statistically significant effect detected, $F(4,178)=0.47$, $p=0.20$. The number of students in a class did not have a statistically significant effect detected, $F(4,178)=0.73$, $p=0.57$. The grade level a teacher taught did not have a statistically significant effect detected, $F(2,180)=0.25$, $p=0.78$. The last demographic, education level, did not have a statistically significant effect detected, $F(4,178)=1.24$, $p=0.30$.

Table 8

ANOVA – Sources of Stress and Demographics

Variable/Level	Mean (SD)	p-value
Gender		
Female	3.63 (0.56)	
Male	3.31 (0.54)	0.001*
Number of Years Taught		
0-5 years	3.67 (0.50)	
6-10	3.68 (0.53)	
11-15	3.56 (0.66)	
16-20	3.40 (0.70)	
21-25	3.60 (0.41)	
26-30	3.43 (0.39)	
31+ years	3.59 (0.69)	0.68
Teaching Environment		
Rural	3.56 (.054)	
Suburban	3.61 (0.57)	
Urban	3.49 (0.73)	0.75
Age		
21-30	3.54 (0.50)	
31-40	3.65 (0.60)	
41-50	3.64 (0.47)	
51-60	3.45 (0.61)	
61-70	3.26 (0.76)	0.20
Number of Students		
1-50	3.50 (0.59)	
51-100	3.49 (0.47)	
101-150	3.62 (0.59)	
151-200	3.70 (0.49)	
201+	3.62 (0.59)	0.57
Grade Level		
Elementary (K-5)	3.54 (0.55)	
Middle School (6-8)	3.61 (0.54)	
High School (9-12)	3.56 (0.61)	0.78
Education Level		
Associate degree	4.07 (0.49)	
Bachelor's Degree	3.58 (0.56)	
Master's Degree	3.57 (0.56)	
Specialist Degree	3.16 (0.77)	
Doctoral Degree	3.69 (0.00)	0.30

Note: * $p < 0.05$, statistically significant

Research Question 6

Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

The assumption of normality was checked using Shapiro-Wilk tests for research question six. Levene's test of equality of variances was used to check for the assumption of homogeneity of variances. When both assumptions were met, one-way ANOVA analyses were performed to test for significant main effects. When a significant main effect was detected, post-hoc analyses were performed using Tukey's tests for pairwise comparisons. Means and standard deviations were reported for each group in all the respective analyses. Using IBM SPSS Statistics Version 28, all analyses were performed, and statistical significance was assumed at an alpha value of 0.05.

For research question six, a statistically significant main effect was found for gender, $F(2,180)=7.29$, $p=0.001$. Table 9 demonstrates the post-hoc testing showed a significant difference, with females rating significantly higher than males on the TSS manifestations of stress. In terms of number of years taught, there was no statistically significant effect yielded, $F(6,176)=1.35$, $p=0.24$. For teaching environment, a statistically significant effect was not found, $F(2,180)=0.63$, $p=0.53$. Age, also, did not have a statistically significant effect detected, $F(4,178)=1.54$, $p=0.19$. The number of students in a class was not found to have a statistically significant effect, $F(4,178)=1.58$, $p=0.18$. The grade level a teacher taught did not have a statistically significant effect detected, $F(2,180)=0.31$, $p=0.74$. The last demographic, education level, did not yield a statistically significant effect, $F(4,178)=0.35$, $p=0.84$.

Table 9

ANOVA – Manifestations of Stress and Demographics

Variable/Level	Mean (SD)	p-value
Gender		
Female	2.73 (0.76)	
Male	2.19 (0.66)	0.001*
Number of Years Taught		
0-5 years	2.86 (0.77)	
6-10	2.64 (0.78)	
11-15	2.46 (0.89)	
16-20	2.67 (0.72)	
21-25	2.44 (0.81)	
26-30	2.88 (0.56)	
31+ years	2.53 (0.76)	0.24
Teaching Environment		
Rural	2.59 (0.78)	
Suburban	2.72 (0.82)	
Urban	2.75 (0.58)	0.53
Age		
21-30	2.80 (0.75)	
31-40	2.68 (0.85)	
41-50	2.52 (0.73)	
51-60	2.65 (0.65)	
61-70	2.18 (0.96)	0.19
Number of Students		
1-50	2.56 (0.76)	
51-100	2.47 (0.78)	
101-150	2.66 (0.72)	
151-200	3.02 (0.84)	
201+	2.70 (1.06)	0.18
Grade Level		
Elementary (K-5)	2.61 (0.77)	
Middle School (6-8)	2.60 (0.79)	
High School (9-12)	2.70 (0.78)	0.74
Education Level		
Associate degree	2.30 (0.99)	
Bachelor's Degree	2.68 (0.82)	
Master's Degree	2.63 (0.73)	
Specialist Degree	2.35 (1.13)	
Doctoral Degree	2.65 (0.00)	0.84

Note: * $p < 0.05$, statistically significant

Chapter 5: Summary, Conclusions, and Recommendations

Introduction

The purpose of this quantitative research study is to investigate the total stress score, stress and manifestation factors, and demographic relationship in Southwestern Indiana teachers. The purpose of this chapter is to present the summary, conclusions, and recommendations for future research based upon the findings as presented in chapter 4.

Summary

The purpose of the research was to investigate the total stress score, stress and manifestation facts, and the demographic relationship in Southwestern Indiana teachers. This research was used to answer the following six questions:

Research Question 1. What is the Total Stress Score intensity of occupational stress experienced by Southwestern Indiana teachers?

Research Question 2. What sources of stress are prevalent among Southwestern Indiana teachers?

Research Question 3. What manifestations of stress are prevalent among Southwestern Indiana teachers?

Research Question 4. Is the Total Stress Score related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 5. **A**re the sources of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

Research Question 6. Are the manifestations of stress related to gender, number of years taught, teaching environment, age, number of students taught, grade level taught, or education level?

The study utilized descriptive statistics and multiple regression based on the data survey as means of methodology. The Teacher Stress Inventory (TSI) developed by Fimian (1988) was used in tandem with a demographic questionnaire (Appendix B). Descriptive statistics were used for data analysis in questions 1-3 while multiple regressions were used for research questions 4-6.

The population of this study included Southwestern Indiana public school teachers in K-12 education in the following counties: Daviess, Dubois, Gibson, Knox, Martin, Perry, Pike, Posey, Spencer, Vanderburgh, and Warrick. A total of 25 public school districts were sampled with a mix of urban, suburban, and rural schools as part of the population (Appendix A). 2,784 email addresses were collected from the 25 school corporations and half were selected through simple random sampling. The invited sample was 1,392 (n=1,392).

The invitation to participate in the survey was sent via school email in October of 2021. Of the 1,392 emails sent, 88 emails were rejected and returned. Of the valid 1,304 email addresses, the responding sample was 185 (13.29%) and the data-generating sample was 183 (13.15%). Statistical Package for Social Sciences (IBM SPSS Statistics) Version 28 for Windows was used for data analysis.

Respondents used the TSI Likert Scale to respond to stress and manifestation factors of occupational stress and create a total stress score. For research question one, the total stress score used was reported with descriptive statistics with a mean score of 3.18, indicating it is in the lower end of medium to great strength or moderately to very noticeable intensity.

Research question two showed the two highest factors for sources of stress were work-related stressors and time management. These scores fell into the higher end between medium to

great strength or moderately to very noticeable prevalence. Research question three showed the two highest factors for manifestations of stress were emotional and fatigue. Both these scores indicated a low mild to medium strength or barely to moderately noticeable prevalence.

The multiple regression techniques for research questions 4-6 showed gender significantly played a role in predicting total stress score and factors of both sources and manifestations. Females were more likely to report stronger sources and manifestations than males. These findings were reported at the 0.05 level of significance.

Conclusions

Based on the conducted research and findings, it is clear that sources and manifestations of stress are ones that have permeated the scope of educators in the limited years of research that have been conducted. Kyriacou (2001) coined the phrase "teacher stress" in his 1977 research, and since then, many others have contributed to the existing literature (Kyriacou & Sutcliffe, 1977). Research has focused heavily on three areas: sources, manifestations, and solutions. This study does not provide any suggestions for the solutions, but readily supports more research and continued recognition of sources and manifestation of stress for teachers in Southwestern Indiana.

Based on the findings from research questions 1-3, the sources of stress from time management and work-related stressors were able to be related back to the literature's identified internal and external stress sources and physical, behavioral and mental manifestations. The manifestations, while they display lower means than the sources, have decile levels that are higher overall than the average of 50. The data support the idea that teachers, while stressed, are now showing higher levels of manifestations than the previous average, demonstrating that the

prevalence and intensity, while consistent, are outpacing the prevalence and intensity of the manifestations.

However, there was no relationship found between the demographics of number of years taught, teaching environment, age, number of students taught, grade level taught, or education level and the total stress score, sources of stress, or manifestations. A significance was found in the relationship between gender and total stress score, prevalence, and intensity of sources of stress and manifestations.

Sources

According to the research, stressors in education range from internal sources (teacher controlled in manifestation and reaction) to external (little to no control) with many pertinent topics. Anderson et al. (1999) identified a large collective list of concerned internal stress sources, which included work overload, lack of support, isolation, inadequate time for relaxation and preparation, short-changed personal life and excessive paperwork (Torres et al., 2009; Wisniewski & Gargiulo, 1997), low salaries and unsupportive parents (Haydon et al., 2018), and national curriculum demands (Wisniewski & Gargiulo, 1997). Kyriacou (2001) creating a list that other scholars built upon, adding time pressures and workload (Guglielmi & Tatrow, 1998), coping with change, evaluations, dealing with colleagues, self-esteem and status, rote conflict and ambiguity, and poor working conditions (Anderson et al., 1997) are internal issues. Guglielmi & Tatrow (1998) and Kyriacou (2001) identifies lack of administrative support as a source of stress. Anderson et al. (1999) concurs adding that apathy is a source of stress as well. Additionally, stressors can be external. Coates and Thoresen (1976) detailed external stress as something a teacher has little to no control over. Items such as classroom size and drugs and

violence (Anderson et al., 1997; Coates and Thoresen, 1976), curriculum change (Coates and Thoresen, 1976), scarcity of resources (Guglielmi & Tatrow, 1998), noise and crowding (Guglielmi & Tatrow, 1998), and discipline (Anderson et al., 1997; Kyriacou, 2001) are other forms of external stress that teachers have little control over.

Based on the data from this study, Fimian's Teacher Stress Inventory (TSI) (1988) broke down the sources of stress into five categories: time management, work-related stressors, professional distress, discipline and motivation, and professional investment. Work-related stressors were the factor that had the highest intensity and prevalence with a mean score of 3.92 (*SD* = 0.74), indicating a medium to great strength or moderately to very noticeable. This score showed the mean as 0.08 away from great strength or very noticeable. The work-related stressor sub-questions were: having little time to prepare for responsibilities and lessons (*M* = 4.12, *SD* = 0.88) (Anderson et al., 1999; Kyriacou, 2001), there is too much to do (*M* = 4.39, *SD* = 0.83) (Anderson et al., 1999), the pace of my school day is too fast (*M* = 3.68, *SD* = 1.18) (Anderson et al., 1999), my caseload/class size is too big (*M* = 3.7, *SD* = 1.12) (Anderson et al., 1997; Coates and Thoresen, 1976), my personal priorities are shortchanged (*M* = 4.2, *SD* = 0.93) (Anderson et al., 1999), and there is too much administrative paperwork (*M* = 3.41, *SD* = 1.22) (Anderson et al., 1999; Torres et al., 2009; Wisniewski & Gargiulo, 1997).

The second highest stress source factor was time management. Time management had a mean score of 3.78 (*SD* = 0.62), indicating a medium to great strength or moderately to very noticeable. The score showed a mean as 0.22 away from having great strength or very noticeable. The time management sub-questions were: over-committing oneself (*M* = 3.80, *SD* = 0.92) (Guglielmi & Tatrow, 1998), impatience (*M* = 3.11, *SD* = 1.10), doing more than one thing at a

time (*M* = 3.80, *SD* = 1.98) (Guglielmi & Tatrow, 1998), little time to relax and enjoy the day (*M* = 4.15, *SD* = 0.95) (Kyriacou, 2001), thinking about unrelated matters during conversation (*M* = 3.46, *SD* = 1.12), feeling uncomfortable about wasting time (*M* = 3.98, *SD* = 1.05), not enough time to get things done (*M* = 4.56, *SD* = 1.05) (Guglielmi & Tatrow, 1998), and rushing speech (Bradshaw, 1991).

Looking at the bigger picture, there are a plethora of stress sources, with many duplications among various studies. Looking at each source separately, the sub-questions from work-related stressors seem to be more external factors while the sub-questions from time management are internal stress sources. This fact speaks to the idea that stress sources for teachers are not one-sided, solely brought upon by the person or external forces.

Manifestations

Fimian's Teacher Stress Inventory (TSI) (1988) categorized the five manifestations as: emotional, fatigue, cardiovascular, gastronomical, and behavioral. As a whole, the manifestation means were lower in intensity and prevalence than the sources of stress. The literature categorizes most manifestations into three categories: physical, behavioral, and mental. Physical symptoms can include heavy breathing or increased heart-rate (Bradshaw, 1991), headache (Ansley et al., 2016; Bradshaw, 1991), muscle tension, cold feet/hands, increased sensitivity, ear ringing, light-headed or dizzy, weight gain or loss, dry mouth (Bradshaw, 1991), colds/flu/weakened immune system, (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998), gastrointestinal issues, frequent urination, constipation, diarrhea, sexual problems (Bradshaw, 1991), cardiovascular changes (Guglielmi & Tatrow, 1998; Kahn et al., 2006), burnout (Bianchi et al., 2014; Guglielmi & Tatrow, 1998; Kahn et al., 2006; Wisniewski &

Gargiulo, 1997), exhaustion (Anderson et al., 1999), ulcers, and somatic complaints (Kahn et al., 2006). Many of these physical symptoms are ones that can be treated in various ways including medication, whereas behavioral manifestations are largely seen as self-changes.

The literature found behavioral manifestations can include: inattention to dress or grooming, frequent lateness, becoming more serious, nervous habits, rushing, aggressive driving, edginess (Bradshaw, 1991), increased frustration or irritability (Bradshaw, 1991; Anderson et al., 1999), inability to be softer, rude, reduced efficiency/productivity, perfectionism (Bradshaw, 1991), insomnia/exhaustion (Anderson et al., 1999; Ansley et al., 2016; Bianchi et al., 2014; Bradshaw, 1991), frequent use of over the counter drugs (Bradshaw, 1991), increased use of drugs/alcohol/tobacco (Bradshaw, 1991; Guglielmi & Tatrow, 1998), gambling or overspending (Bradshaw, 1991), absenteeism (Anderson et al., 1999; Guglielmi & Tatrow, 1998), unhealthy eating (Bianchi et al., 2014; Guglielmi & Tatrow 1998), mood or behavior changes (Ansley et al., 2016), dissatisfaction, hyper-vigilance, fearful (Anderson et al., 1999), reduced personal accomplishment (Bianchi et al., 2014; Wisniewski & Gargiulo, 1997), and sense of failure (Wisniewski & Gargiulo, 1997). These symptoms can wreak havoc on ones' sense of normalcy, much like mental manifestations.

As noted by the literature, mental manifestations included: nervousness (Bradshaw, 1991), anxiety (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998), worry (Ansley et al., 2016; Bradshaw, 1991), guilt, moodiness, instability (Bradshaw, 1991), depression (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998; Kahn et al., 2006), pessimistic thinking, racing thoughts, problems with concentration, forgetfulness, nightmares, difficulty in decision making, disorganization, confusion, overwhelm, resentfulness,

frustration, crying, loneliness, never being good enough, negative inner voice (Bradshaw, 1991), fear, dread (Ansley et al., 2016), depersonalization (Bianchi et al., 2014; Wisniewski & Gargiulo, 1997), suicidal ideation, cognitive impairment, guilt, self-blame (Bianchi et al., 2014), psychosomatic complaints, cynicism, and emotional exhaustion (Kahn et al., 2006; Wisniewski & Gargiulo, 1997). These manifestations can detrimentally change a person, and as seen by the TSI (Fimian, 1988) results, many of these manifestations are similar to those found in prior research.

The study found emotional manifestations to be the highest mean at 3.10, indicating a lower medium to great strength or moderately to very noticeable prevalence. The study utilizes Fimian's TSI to indicate that teachers mostly feel anxious (M = 3.94, SD = 1.20) (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998), depressed (M = 3.04, SD = 1.38) (Anderson et al., 1999; Bradshaw, 1991; Guglielmi & Tatrow, 1998; Kahn et al., 2006), insecure (M = 3.03, SD = 1.34) (Bradshaw, 1991), unable to cope (M = 2.97, SD = 1.43) (Bradshaw, 1991) and feel vulnerable (M = 2.83, SD = 1.30). The symptoms from Fimian's TSI (1988) consistently pair with the various literature.

The second highest mean, fatigue manifestations, had a mean of 3.08 (SD = 1.14). This mean indicated a lower medium to great strength or moderately to very noticeable prevalence. The study indicated that teachers felt fatigue symptoms of sleeping more than usual (M = 2.44, SD = 1.39) (Anderson et al., 1999; Ansley et al., 2016; Bianchi et al., 2014; Bradshaw, 1991), procrastinating (M = 2.93, SD = 1.23) (Bradshaw, 1991), fatigue (M = 3.54, SD = 1.30) (Kahn et al., 2006; Wisniewski & Gargiulo, 1997), physical exhaustion (M = 3.82, SD = 1.14) (exhaustion (Anderson et al., 1999; Ansley et al., 2016; Bianchi et al., 2014; Bradshaw, 1991), and physical

weakness (*M* = 2.67, *SD* = 1.26) (exhaustion (Anderson et al., 1999; Ansley et al., 2016; Bianchi et al., 2014; Bradshaw, 1991). Much of the literature coincides with Fimian's TSI (1988) and substantiates similar issues spanning for decades.

Gender and Stress

The significance in the relationship strength between gender and total stress score, sources of stress, and manifestations of stress was noted to be higher in females than males in research questions four, five and six. This survey provides no further context to decipher the reason for this relationship but allows the reader to draw his or her own opinion based on the generalized idea of women being more stressed or carrying a heavier mental load than men. It is also important to note the number of female participants versus males in the final demographic response rate.

Fimian's TSI (1988) was a small snippet of the broader picture to be seen. Teachers, and largely female teachers, are stressed in a variety of ways, coming from various sources. This topic was researched, and research was conducted, due to the personal nature of the issues at hand, as the researcher's former position as a classroom teacher often required stacked responsibilities, new professional developments, terminology and buzz words, programs and strategies, relationship building, corporate walk-throughs, data dives, and students' social and emotional health on top of expected classroom instruction. While these aspects of the profession are not bad by and large, day to day operations, continued use of diverse programs, difficult roll out process, and numerous responsibilities make many teachers resentful of the current state of education.

The sources of stress, as detailed by Fimian (1988), are far from the daily cry of teacher woes, yet the general complaint remains the same across outlets, with teacher shortages more evident than ever. With the information provided in this survey, districts will need to arm themselves to combat the teacher shortage by supporting educators through manifestation management, which could be timely, costly or cumbersome, or eliminate the stress associated with the highest stressors, time management and work-related stressors. How to accomplish this feat is difficult, but small steps, such as recognizing areas of prevalent or intense sources of stress, could potentially lower the total stress scores and manifestations. As districts begin to triage their programs, money is an enticing prospect as areas of deficiency are sometimes offering various stipends, bonuses or retention payments in hard to fill areas. These incentives, however, do not solve the core problem of the stress itself, which is significant in terms of gender in the relationship among Total Stress Score, sources, and manifestations, as well as prevalent sources and manifestations of occupational stress. Specifically, how can females find lower levels of stress in their positions? As identified by the research, lessening the work-related stressors and time management solutions are ways to reduce teaching stress.

While districts will continue to pour money into short term solutions, taking a comprehensive look at the particulars of time management and work-related stressors that can be eliminated would pay dividends in retention, reducing stress, and promoting a healthy work environment. Until a district chooses to focus on these issues, continual shortages are inevitable, and increased stress will remain.

Positivist Paradigm

Based on the assumptions and principles of the positivist paradigm, the goal is to find a correlation between any demographic and the outcome of the Teacher Stress Inventory (TSI) averages. Because the positivist paradigm uses quantitative data and utilizes association between causal relationships, this theory verification approach is appropriate when identifying a relationship existing between gender and Total Stress Score, stress sources and stress manifestations.

Recommendations for Future Research

Researching the total stress score and sources and manifestations of stress as related to occupational stress in Southwestern Indiana teachers is useful, but this is only one element of the research to be done. This study does have limitations; contributions to the greater good of education can be achieved through further research:

1) Conduct this study in combination with the Maslach Burnout Inventory (MBI).
2) Conduct this study in a post-Covid environment.
3) Examine the effects of educational stress throughout the year.
4) Conduct this quantitative study in tandem with qualitative interviews.
5) Conduct a quantitative study in several other geographic areas of the state with a similar make-up of rural, suburban, and urban environments.

Summary

The purpose of this research study was to examine the prevalence and intensity of the sources and manifestations of occupational stress in Southwestern Indiana public K-12 teachers with the intent to shed light on the issues that teachers face in relation to depression, anxiety and

burnout. The study was organized into five chapters. Chapter one presented the introduction, purpose statement, research questions, terms, assumptions, limitations and delimitations of the study. Chapter two presented a comprehensive review of the literature indicating past research of various occupational stress areas, including sources, symptoms, and solutions. Chapter three presented the quantitative research design. Chapter four presented the analysis of findings using the Teacher Stress Inventory (TSI) (Fimian, 1988) and utilized demographic data to inform research questions. Chapter five utilized the findings from chapter four to present the summary, conclusions, and recommendations for future research. This study may be important to administrators in Southwestern Indiana, Boards of Education, the Indiana Department of Education, and teacher preparatory programs that provide instructors to many area schools, as well as past, current, and future educators as districts continue to combat retention, stress levels and healthy work environments.

The researcher of this study recognizes that many variables play into the final determination of what stress factors and manifestations look like across the Southwestern Indiana area. Ultimately, while there was little significance in many demographics as they relate to teacher stress factors and manifestations, gender played a role in testing the difference between means. Based on the analysis, areas of concern Fimian's 1988 Teacher Stress Inventory (TSI) manual identified medium to high levels of stress with work-related stressors and time management sources and medium levels of stress in emotional and fatigue manifestations. To combat these issues, administrators making educational decisions should look at ways to alleviate stress in these areas to improve teacher retention, reduce stress, and promote a healthy work environment. Without a solution to decrease teacher stress, our current educational state

will not be sustained and will continue to drain those that have answered the calling to become a teacher.

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Appendices

Appendix A:

School Districts and Corporations within Southwest Indiana

County	School District or Corporation	Address
Daviess	Barr-Reeve Community Schools	373 North Main St Montgomery, IN 47558
Daviess	North Daviess Community School Corporation	5494 East Sr 58 Elnora, IN 47529
Daviess	Washington Community Schools	301 East South St. Washington, IN 47501
Dubois	Greater Jasper Consolidated Schools	1520 St Charles St. Jasper, IN 47546
Dubois	Northeast Dubois County School Corporation	5379 East Main St. Dubois, IN 47527
Dubois	Southeast Dubois County School Corporation	432 East 15th St. Ferdinand, IN 47532
Dubois	Southwest Dubois County School Corporation	113 North Jackson St. Huntingburg, IN 47542
Gibson	East Gibson School District	941 S. Franklin St. Oakland City, IN 47660
Gibson	North Gibson School Corporation	1108 North Embree St. Princeton, IN 47670
Gibson	South Gibson School Corporation	1029 West 650 South Fort Branch, IN 47648
Knox	North Knox School Corporation	11110 North Sr 159 Bicknell, IN 47512
Knox	South Knox School Corporation	6116 East Sr 61 Vincennes, IN 47591
Knox	Vincennes Community School Corporation	1712 South Quail Run Rd. Vincennes, IN 47591
Martin	Loogootee Community Schools	201 Brooks Ave.

		Loogootee, IN 47553
Martin	Shoals Community Schools	11741 Ironton Rd. Shoals, IN 47581
Perry	Cannelton City Schools	109 S. 3rd. St. Cannelton, IN 47520
Perry	Perry Central Community Schools	18677 Old Sr 37 Leopold, IN 47551
Perry	Tell City-Troy Township Schools	837 17th St. Tell City, IN 47586
Pike	Pike County School Corporation	211 S 12th St. Petersburg, IN 47567
Posey	Metropolitan School District of Mount Vernon	1000 W. 4th St. Mt. Vernon, IN 47620
Posey	Metropolitan School District of North Posey County	101 North Church St. Poseyville, IN 47633
Spencer	North Spencer County School Corporation	3720 East Sr 162 Lincoln City, IN 47552
Spencer	South Spencer County School Corporation	321 South 5th St. Rockport, IN 4763
Vanderburgh	Evansville Vanderburgh School Corporation	951 Walnut St. Evansville, IN 47713
Warrick	Warrick County School Corporation	300 East Gum Boonville, IN 47601

Appendix B:

Teacher Stress Inventory Questionnaire

Q1 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
I easily over-commit myself.	○	○	○	○	○
I become impatient if others do things too slowly.	○	○	○	○	○
I have to try doing more than one thing at a time.	○	○	○	○	○
I have little time to relax/enjoy the time of day.	○	○	○	○	○
I think about unrelated	○	○	○	○	○

matters during conversations.					
I feel uncomfortable wasting time.	○	○	○	○	○
There isn't enough time to get things done.	○	○	○	○	○
I rush in my speech.	○	○	○	○	○

Q2 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
There is little time to prepare my lessons/responsibilities.	○	○	○	○	○
There is too much work to do.	○	○	○	○	○
My pace of the school day is too fast.	○	○	○	○	○
My caseload/class size is too big.	○	○	○	○	○
My personal priorities are shortchanged due to time demands.	○	○	○	○	○
There is too much administrative paperwork in my job.	○	○	○	○	○

Q3 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
I lack promotion and/or advancement opportunities.	○	○	○	○	○
I am not progressing in my job as rapidly as I would like.	○	○	○	○	○
I need more status and respect for my job.	○	○	○	○	○
I receive an inadequate salary for the work I do.	○	○	○	○	○
I lack recognition for the extra work and/or good teaching I do.	○	○	○	○	○

Q4 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
I feel frustrated because of discipline problems in my classroom.	○	○	○	○	○
I feel frustrated because I have to monitor student behavior.	○	○	○	○	○
I feel frustrated because some students would do better if they tried.	○	○	○	○	○
I feel frustrated attempting to teach students who are poorly motivated.	○	○	○	○	○
I feel frustrated because of inadequate/poorly defined discipline problems.	○	○	○	○	○
I feel frustrated when my authority is rejected by the students/administration.	○	○	○	○	○

Q5 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
My personal opinions are not sufficiently aired.	○	○	○	○	○
I lack control over decisions made about my classroom and school matters.	○	○	○	○	○
I am not emotionally and intellectually stimulated on the job.	○	○	○	○	○
I lack opportunities for professional improvement.	○	○	○	○	○

Q6 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

Due to my job, I respond to stress...

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
… by feeling insecure.	○	○	○	○	○
… by feeling vulnerable.	○	○	○	○	○
… by feeling unable to cope.	○	○	○	○	○
… by feeling depressed.	○	○	○	○	○
… by feeling anxious.	○	○	○	○	○

Q7 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

Due to my job, I respond to stress...

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
… by sleeping more than usual.	○	○	○	○	○
… by procrastinating.	○	○	○	○	○
… by becoming fatigued in a very short time.	○	○	○	○	○
… with physical exhaustion.	○	○	○	○	○
… with physical weakness.	○	○	○	○	○

Q8 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

Due to my job, I respond to stress...

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
… with feelings of increased blood pressure.	○	○	○	○	○
… with feeling of heart pounding or racing.	○	○	○	○	○
… with rapid and/or shallow breath.	○	○	○	○	○

Q9 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

Due to my job, I respond to stress...

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
… with stomach pain of extended duration.	○	○	○	○	○
…with stomach cramps.	○	○	○	○	○
…with stomach acid, heartburn, and/or indigestion.	○	○	○	○	○

Q10 The following statements are a number of teacher concerns. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate your level of agreement when you experience this by marking the appropriate rating on the 5-point scale. If you have not experienced this feeling, or if the item is inappropriate for your position, chose 1 - No Strength or Not Noticeable. The rating scale is shown at the top of each statement set.

Due to my job, I respond to stress...

	1 - No Strength or Not Noticeable	2 - Mild Strength or Barely Noticeable	3 - Medium Strength or Moderately Noticeable	4 - Great Strength or Very Noticeable	5 - Major Strength or Extremely Noticeable
… by using over-the-counter drugs.	○	○	○	○	○
… by using prescription drugs.	○	○	○	○	○
… by using alcohol.	○	○	○	○	○
… by calling in sick.	○	○	○	○	○

Q11 What is your identified gender?

- ○ Male
- ○ Female
- ○ Non-binary / third gender
- ○ Prefer not to say

Q12 How many years have you taught?

- ○ 0 - 5 years
- ○ 6 - 10 years
- ○ 11 - 15 years
- ○ 16 - 20 years
- ○ 21 - 25 years
- ○ 26 - 30 years
- ○ 31+ years

Q13 How do you describe your teaching environment?

- [ ] Urban
- [ ] Suburban
- [ ] Rural

Q14 What is your age?

- ○ 21-30
- ○ 31-40
- ○ 41-50
- ○ 51-60
- ○ 61-70
- ○ 71+

Q15 How many students do you teach each day? Please consider a two-day block schedule to be one full day.

- ○ 1 - 50 students
- ○ 51 - 100 students
- ○ 101 - 150 students
- ○ 151 - 200 students
- ○ 200+ students

Q16 What grade level(s) students do you teach?

- ☐ Pre-Kindergarten
- ☐ Elementary (K - 5)
- ☐ Middle School (6 - 8)
- ☐ High School (9 - 12)

Q17 Which is the most advanced degree you have?

- ○ Associate degree
- ○ Bachelor's Degree
- ○ Master's Degree
- ○ Specialist Degree
- ○ Doctoral Degree

Appendix C:

Permission from M. Fimian to use Teacher Stress Inventory Survey

Hi Erin,

How are you today?

Being a Hoosier myself, feel free to make use of the TSI in the way that you describe….

Since my website site is undergoing an overhaul, I've attached the documentation that you'll find interesting.

Regards,

Michael

Dr. Michael J. Fimian

InstructionalTech.net

774-200-7881

www.InstructionalTech.net

https://www.linkedin.com/in/michaelfimian/

Appendix D:

Institutional Review Board (IRB) Approval

UNIVERSITY OF SOUTHERN INDIANA
Office of Sponsored Projects and Research Administration
8600 University Boulevard * Evansville, Indiana 47712 * 812-465-1126
www.usi.edu/ospra - rcr@usi.edu

DATE:	September 1, 2021
TO:	Erin White, M.S.
FROM:	USI Office of Sponsored Projects and Research Administration
PROJECT TITLE:	[1784130-1] Prevalence and Intensity of Occupational Stress Causes and Manifestations in Southwestern Indiana Teachers
REFERENCE #:	2022-005-SEE
SUBMISSION TYPE:	New Project
ACTION:	APPROVED
IRB APPROVAL DATE:	September 1, 2021
EXPIRATION DATE:	November 7, 2021
REVIEW CATEGORY:	TYPE 1 RESEARCH - Exempt Category # 2

The above project has been approved by USI's IRB under the provision of Federal Regulations 45 CFR 46.

This approval is based on the following conditions:

1. The materials you submitted to the IRB (through IRBNet) provide a complete and accurate account of how human subjects are involved in your project.
2. You will carry on your research strictly according to the procedures described in the materials presented to the IRB.
3. If any changes are made, you will submit the Amendment Form through IRBNet.
4. You will immediately report to the Office of Sponsored Projects and Research Administration any problems or adverse events encountered while using human subjects.
5. Prior to expiration, you will submit a Continuing Review Form through IRBNet.

This project requires continuing IRB review on an annual basis. Please use the Continuing Review Form for this procedure. Your documentation for continuing review must be received with sufficient time for review and continued approval before the expiration date of November 7, 2021.

To renew this project or make a modification, please see the IRBNet User Manual on our website at usi.edu/ospra for step-by-step instructions on submitting the Continuing Review Form or the Amendment Form.

If you have any questions, please contact us at 812-465-7000 or rcr@usi.edu.

Please include your project title and reference number in all correspondence with this committee.

Dr. K. Draughon

Dr. Katherine A. Draughon
Executive Director - OSPRA

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within The Office of Sponsored Projects and Research Administration's records.

Appendix E:

Ethics and Informed Consent Statement

UNIVERSITY OF SOUTHERN INDIANA
Prevalence and Intensity of Occupational Stress
Causes and Manifestation in Southwestern Indiana Teachers
IRBNet ID Number 1784130

Informed Consent Document

Online or Web Based Survey

You are invited to participate in a research study on the prevalence and intensity of occupational stress causes and manifestation on teacher health and wellness. This study is being conducted by principal investigator Erin White, at the University of Southern Indiana, and faculty supervisor Dr. Kelly Sparks. For questions regarding the research, Erin White can be reached at eewhite2@eagles.usi.edu or 812-499-5023.

This study will take approximately 15 minutes of your time. You will be asked to complete an online survey about occupational stress causes and manifestations, or symptoms, as related to your teaching role. This survey is web based and may be taken at any location internet service is provided.

There are no risks to individuals participating in this survey beyond those that exist in daily life. No physical risks are noted. However, this survey may cause psychological risks through undesired changes in thought processes and emotion including episodes of depression and confusion resulting from feelings of stress, guilt, and loss of self-esteem. The social, legal, and economic risks are minimal. In the survey, no names are being collection to pair with survey results. There is a risk for a breach of confidentiality. Participants may be upset by the aspects of the research. Some participants may become fatigued or frustrated due to the length of the survey.

Completing this survey will provide information that will contribute to educational research on occupational stress factors and manifestations in Southwestern Indiana, as well as the prevalence and intensity of these factors.

Your participation in this research will be completely confidential. No identifying information will be collected.

Your decision to participate or decline participation in this study is completely voluntary and you have the right to terminate your participation at any time without penalty. You may skip any questions you do not wish to answer. If you do not wish to complete this survey simply close your browser.
By completing this survey, you are consenting to participate in this survey.

Please print a copy of this consent form for your records if you so desire.

Appendix F:

Recruitment Letter

Recruitment Letter

7/20/21

Dear Teacher,

Teacher stress is a prevailing issue in Southwestern Indiana. As a means of researching the frequency and intensity of prevalent stress factors and manifestations (symptoms) teachers face, a survey link is enclosed to help understand this issue. No information will be gathered to personally identify you.

This online survey will take approximately 15 minutes to complete and will ask questions related to job-related prevalent stress factors and manifestations in frequency and intensity, as well as demographic questions. There are no risks to individuals participating in this survey beyond those that exist in daily life. By filling out and returning this survey, you may help school districts in Southwestern Indiana better understand how to provide encouraging and positive teaching environments while maintaining high rates of teacher retention.

Thank you for your time and consideration in this important research matter.

Sincerely,
Erin White
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